A fan product for **GURPS**® Fourth Edition

Earth Spells for GURPS Magic™

by John Shimmin

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Earth Spells for GURPS

A wildly unofficial fan supplement by John Shimmin

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Introduction

Beneath all the complexity of life lies earth and stone, the bones of the planet. Since time immemorial, humans have relied on the riches of earth – caves for shelter, flint or obsidian for tools, clay to store winter provisions, and the fertile soil to feed them. The secrets of working stone and metals were matters for ritual and superstition, passed on to favored apprentices. Miners ventured into the underworld with prayer and sacrifice. Farmers learned to read the soil, tracing hidden springs and coaxing bounty from the land. These lore-keepers developed elaborate bodies of knowledge, divided into spells – trusted ritual techniques that could be mastered one by one.

Among the earliest, primal magics, the college of Earth is unparalleled in its utility. It offers tools, shelter, and defenses; it eases the labor of the fields, turns tainted earth to fertile soil, and shapes the land itself to suit a society's needs.

In a fantasy world, earthen spells are studied by dwarves, village chiefs, architects, and artisans – as well as martial mages seeking to control the battlefield. In urban fantasy, power over stone is a trademark of city shamans and wizardly burglars. In horror, earth spells are used by mountain and desert hermits, by killers who can sense footsteps and reshape architecture, and by underground-dwellers who creep out to prey on unsuspecting folk. At higher tech levels, mastery of metal is invaluable to steampunk savants, technological adepts, and rag-tag starship crews.

Earth archmages have the frankly terrifying power to not merely reshape the entire landscape, but sever chunks of it – inhabitants, structures, and all! – and relocate them wherever they please. Used benevolently, this can rescue entire communities from disaster; it can equally allow wholesale theft of valuable land and its people.

This supplement adds 57 new spells to the Earth college, and adapts several more. Key information about earth and rocks of all kinds, and options pertinent to mages, are also included.

Ancient Greek advisor: Edward Lacey.

About GURPS

If you're reading this, you are either already familiar with ***GURPS,*** or making some very peculiar choices with your reading material. You can learn about ***GURPS*** at the Steve Jackson Games website.

Publication History

The section on earthquakes (p. 10) draws heavily from *Earthquake Weather* (https://www.sjgames.com/pyramid/sample.html?id=4842), *Earthquake* (***GURPS Fantasy,*** p. 86), and the Earthquake spell (***GURPS Magic,*** p. 54).

About the Author

John Shimmin inadvertently spent several years undercover in a university Earth Sciences department and somehow survived, earning the proud(?) title of "the gentleman with the complicated Excel sheets" and an extremely basic understanding of the field, for which he apologises profusely.

The Living Earth

For early societies, the earth is the source of life. It provides tools of flint and obsidian to craft and hunt. Walls of mud or stone give shelter from the elements, and defense against predators and enemies alike. Glittering gems and veins of gold become symbols of wealth and authority.

Though inedible, within it are nourishing roots and burrowing creatures. It brings forth plants, and with reverent tending it offers plentiful harvests; clay provides the vessels to store them for harder times. Even the water of life bubbles out of the ground.

Fundamentals

Although stone isn't alive in most settings, the soil is a living ecosystem. Aside from plants and burrowing animals, it's home to insects, worms, fungal colonies, and countless microorganisms. Roughly 1/400th of soil's weight is living matter! These are vital to the nutrient cycle that keeps soil fertile.

Earth and Soil

In GURPS terms, 'earth' encompasses soil (what we tend to know as 'earth') as well as sand, clay, stone, and metal – everything inanimate that's part of the ground beneath us, or an immediate product of it.

Soil is a complex blend of sand, silt (small grains), and clay (fine grains), plus organic matter, water, and air. The exact balance of these components determines its properties, the creatures that live in it, and the plants it supports. Soil is a living ecosystem, and healthy soil supports a vast array of species. Wet soil becomes mud: a habitat for aquatic and amphibious creatures, used by animals for bathing, and by low-tech humans for building.

Sand is small particles of rock, typically quartz. Some tropical beaches are dominated by limestone and eroded shell or coral. Without soil, sand is typically barren. Underwater, nutrients can be supplied by the currents and sand supports more life. It tends to form dunes, and is prone to create dust storms – these pose a danger to travelers and can cause significant pollution. Wind-blown sand can be highly erosive, and causes problems for infrastructure and technology. When saturated with water, it can form quicksand and trap creatures that walk on it.

Stone, or rock, is a solid block of crystalline grains (minerals). Some rocks are a mixture of several minerals. Most are hard and can be shaped into useful objects or structures. They break rather than bending, limiting their possible uses.

Metals are dug out of the earth, usually in the form of ores that must be processed. The majority of known chemical elements are metals, and their properties vary enormously: tough iron and soft lead, inert gold and reactive potassium, volatile mercury, toxic arsenic, and the valuable but deadly radioactive metals. The distinctive features of metals are good conductivity of heat and electricity. Metals are more malleable than stone, making them more versatile. Spells dealing with metals appear in both the Earth college and the Technological college. Broadly speaking, those dealing with metal as a substance are Earth spells, and those dealing with metal objects are Technological.

Studying the Earth

While the term "geology" emerged in the 1750s, scholarly interest dates back into antiquity and beyond. Ancient writers had various incentives. Practical motives included classifying minerals and metals for use, locating water sources, and improving farming methods. There was a natural interest in seismic and volcanic hazards, ranging from proto-scientific study to supernatural interpretations. Travellers and landowners pondered the origins of the landscape around them. Evaluating soil quality and the relative value of land was politically and economically important.

Like other early sciences, the field was part philosophy, part natural history, part vocational knowledge, and part mythology. Aristotle argued that the landscape underwent gradual changes, rivers shifting and drying and even the continents altering. Theophrastus classified many minerals by measurable physical properties.

In the middle ages, scholars drew more heavily on observation. Shen Kuo proposed a mechanism for landscape change through erosion and deposition, and identified that marine fossils showed the land had once been underwater. In between philosophy and medical

studies, Ibn Sina suggested that mountains and valleys were formed through upheavals and the flow of water. In Europe, Christianity's insistence on the biblical flood drove interest in proving its truth through observation of the earth and fossils, but restricted the acceptable interpretations of this evidence.

It was only in the 17th century that the concept of rock strata was established. Capitalism and industrialisation, particularly mining, spurred on more systematic study in the 18th century. It slowly became acceptable to dispute religious views on the age and origins of the earth. Advances in chemistry in the late 18th century allowed better understanding of rock formation. Continental drift was proposed in the 1920s, but not widely accepted until the 1960s.

In a world with earth magic, the field might advance much faster. The slow advance of the field partly results from the difficulty of studying deep inside the earth, and the danger of observing seismic phenomena. Consulting with earth spirits and elementals could reveal the planet's composition and internal processes centuries earlier.

Buried Treasure

Humans (and, according to fiction and folklore, all manner of beings) are fascinated by what may lie hidden under the earth. While gems and precious metals are enticing, the main attraction is usually artificial treasures: the remains of lost civilizations (particularly their valuables), or hoards of silver buried to keep them safe from prying eyes. This remains an attractive possibility for treasure-hunters even today; thousands of hoards have been recorded around the world, and discoveries continue. Countless others were doubtless plundered with scholars none the wiser.

A grislier possibility is stumbling upon illicit graves and evidence of foul play. These are rarely valuable in a monetary sense, but can help unravel mysteries. In countries with a recent history of atrocities, hunting for secret burials may be organized by authorities or volunteer groups.

Precious Stone

Gems are rocks prized for their aesthetic properties. Most of these are minerals, but some non-crystalline stones are also considered gemstones. In addition to their use in jewelry and in decorating luxury items, gems are associated with healing, divination, and other magic. See *Gemstones* (***GURPS Thaumaturgy,*** p. 99), *Gem Injection Rules* (***GURPS Thaumaturgy,*** p. 240), and *Lapidism* (***GURPS Thaumatology: Urban Magics,*** p. 18) for ideas on the role of gems in magic.

Earth and Fire

Coal isn't the only earth that burns. Peat is flammable when dry, and can be used as tinder; treat as flammability 1 (p. B433). Once ignited, peat deposits can smolder underground for *centuries*. Earth mages in peat- and coal-rich regions object to careless use of fire as much as any Plant mage.

Coal Dust, Peat Tinder: Highly Flammable (1 point).

Peat Chunks: 2 points.

Coal Chunks: Flammable (3 points).

Working with Stone

Rocks can be classified by hardness and toughness, giving a rough estimate of how resilient they are and the time needed to work with them.

The details in the ***Basic Set*** reflect common types of structural stone – those of medium hardness such as limestone and sandstone. For softer stone, *halve* DR and *double* the digging speed (p. B351). For harder stone, *double* DR and *halve* the digging speed.

Soft Rocks: Marble, slate, some limestone, coal, soapstone.

Medium Rocks: Limestone, sandstone, granite, schist.

Hard Rocks: Basalt, chert, feldspar, jade, quartz.

Structural Properties Table

Material	DR/ inch	HP/ inch	Cover DR/ inch	Notes
Asphalt	9*	19	6-9*	
Brick	8*	18	5-8*	
Concrete	12*	19	6-9*	
Crystal	26*	19	13*	
Earth, normal	-	12	0.8	Ablative
Earth, hard	1*	12	1*	
Glass	5*	19	5-8	Brittle
Stone, soft	6*	20	8*	
Stone, average	13*	20	11*	
Stone, hard	26*	20	13*	

* For all the materials discussed here, repeated *impaling, piercing,* or *large piercing* attacks against a specific point lower DR *at that spot* as though it were semi-ablative. Repeated *burning, corrosion, crushing, cutting,* or *huge piercing* attacks on one point reduce DR

at that spot as though it were ablative. Except for hard earth, DR never falls below 3 for the materials listed.

> *Earth is ancient now, but all knowledge is stored up in her. She keeps a record of everything that has happened since time began. Of time before time, she says little, and in a language that no one has yet understood. Her mud and lava is a message from the past.*
>
> Jeanette Winterson — *"Weight"*

Earth Terrain

To avoid repetition, the following terms are used in the descriptions below.

Arduous: The terrain is particularly exhausting to slog through, giving a -2 penalty on Hiking and Running rolls to avoid injury and fatigue. Sure-Footed doesn't help, but an appropriate Terrain Adaptation negates these effects.

Bad Footing: +1 movement point per yard (hex) to cross; -2 to attack rolls; and -1 on active defense rolls. The GM may also apply -2 to DX-based skills for whole-body movement, such as Acrobatics, Dancing, and Jumping; and on DX rolls to remain standing.

Very Bad Footing: As Bad Footing, but the values are doubled.

Collapsing: Can collapse when disturbed by vigorous action, explosions and so on. This works like a self-control roll (p. B121); a 9 indicates unstable terrain, and a 15 is relatively stable. For simplicity, roll at most once per second, with a penalty for additional disturbances. Severe weather can trigger Collapsing terrain, but is best restricted to occasional rolls. A failed stability roll triggers a large-scale slip, such as a rockslide. Once triggered, roll once per second at a -2 penalty; on a success, the slope stabilizes with no further effect. Anyone in the area of a slip slides 1d-2 yards per second, must succeed at an Acrobatics roll to remain standing, and has a 1-in-6 chance of being struck by debris unless he makes a successful dodge. During a slip, footing is always very bad – neither Sure-Footed nor Terrain Adaptation helps!

Treacherous: It's easy to slip or trip in this terrain. While running, roll every 100 yards against the better of DX or DX-based Running to avoid a mishap; on sloping ground roll every 20 yards. A failure means losing control (p. B395). An appropriate Terrain Adaptation or Sure-Footed perk negates this risk.

Bog

Waterlogged ground with reeds and mossy plants, often entirely submerged. All bogs are bad footing and Treacherous, and deep bogs are Arduous. The sediment-rich water imposes -1 to -9 to Vision rolls, dependent on depth. Counts as a soft object for falling damage. Equivalent to Bad ground terrain for travel, or Very Bad for deep bogs.

Mire

Heavy clay mud that clings to limbs, clogs soles and can drag boots off feet. Mire counts as very bad footing and Arduous. Equivalent to Very Bad ground terrain for travel. Hobnails and spiked shoes lose their benefits after ten yards in mire, and remain useless until cleaned.

Mud

Wet, slippery ground. Treat as bad footing and Treacherous. Equivalent to Bad ground terrain for travel. Unless very wet, mud holds footprints well, giving +2 to Tracking and an additional +2 to recognize *specific* footprints.

Roads and Paths

Camber measures the difference in height between the two edges of the road at a given point. *Crossfall* measures the overall difference in height across a road; it is usually 1-3% on modern roads, with the peak in the center, but can reach 10% or more on sharp corners with a steep camber. For every five percentage points of slope, movement skills suffer a -1 penalty for bad conditions. This is doubled for unbalanced vehicles like bicycles, and for top-heavy loads.

On particularly steep cambers or crossfalls, getting out of a vehicle quickly may require an Acrobatics or DX roll – or the door may strike the sidewalk and be impossible to open.

Cornering is particularly influenced by camber. A beneficial camber (higher on the outside of the turn) *halves* the penalties for tight turns (see *Pushing the Envelope*, p. B395) while an adverse camber *doubles* them. Use this modifier *instead* of the rules above.

Inadequate camber and crossfall increases the risk of flooding and aquaplaning in wet conditions.

Rocks

The effects of rocky terrain vary with the size of the rocks. Crunching *pebbles* give -2 on Stealth checks to move quietly. Lumpy *stones* – too big to ignore and too small to conveniently stand on – are uncomfortable underfoot and liable to twist ankles; treat as Treacherous (every 20 yards) and bad footing, equivalent to Bad ground terrain.

Fields of *boulders* must be scrambled over, making them Arduous and counting as Very Bad ground terrain. Roll for Treacherous every 20 yards in good footwear; horses and anyone with unsuitable shoes must roll every 10 yards. The largest boulders require Climbing or Jumping rolls to move through, and are impassible for most vehicles and mounts. Travelers in boulder country should invest in baggage goats.

Sand

Hard-packed sand is easy to walk on, equivalent to Average ground terrain, but soft sand is bad footing and Arduous.

Soft sand is easily marked (+2 to Tracking) but can't hold detail, and any wind rapidly covers the tracks. Hard, damp sand (such as beaches) holds detailed tracks well and isn't affected by wind, giving +2 to Tracking and an additional +2 to recognize *specific* footprints.

Sand dunes are Collapsing (sand, blinded for 1d-3 seconds) and equivalent to Bad ground terrain if hard, or Very Bad if soft.

Realistic *quicksand* is a hazard that traps creatures with sucking strength (see ***Dungeon Fantasy 16: Wilderness Adventures,*** p. 33 for the deadly stuff). Anyone stumbling into quicksand becomes stuck until they can make a ST or ST-based Escape roll. Each attempt takes one turn and costs 1 FP; apply encumbrance penalties. Humans will float on quicksand, so a calm victim can lie on their back and wait for rescue. Exposure, predators, and rising tides are the main dangers.

Scree

Loose stone piled unstably on a hillside. Bad footing applies for *both* instability *and* steepness, resulting in very bad footing; appropriate Sure-Footed perks can negate these penalties. Scree is both Treacherous and Collapsing (rocks, 1d6-4 crushing); anyone who falls prone, or rolls a critical failure on any movement skill or dodge roll, slides 1d-2 yards downhill and triggers a stability roll. Equivalent to Very Bad ground terrain for travel.

Soil

Soft earth is comfortable to walk on. Footprints stand out clearly, giving +2 to Tracking. Usually equivalent to Good or Average ground terrain travel.

When baked hard by the sun, treat as stone for falling damage and tracking. Hard earth is easy walking when flat, but as challenging as stone if uneven.

Ploughed fields feature ridges of loose soil that shifts underfoot; it's easy to stumble and twist an ankle. Some crops are planted in permanent ridges. Treat as bad footing and Treacherous. *Large* furrows must be clambered or jumped over, making them Arduous as well. Equivalent of Bad ground terrain, or worse on hills.

Seismic Phenomena

Simple rules for many earth-related hazards can be found in *Natural Disasters* (***GURPS Fantasy,*** p. 86). More detailed rules are presented here for hazards related to spells of the Earth college.

If magic is prevalent, settlements in seismically-active areas should use it to warn of upcoming disasters, to reduce danger, and to create sanctuaries against these hazards. Predict Earth Movement is the most fundamental of these spells, and any high priest, shaman or royal wizard worth their salt will cast it regularly with the longest forecast he can afford.

The Link spell is invaluable to the seismic mage. Instead of relying on the resources to hand when an eruption begins, he can spend months casting protective spells in elaborate ceremonies with all the resources their community can spare. It's also expensive, easily quadrupling the cost of many spells; a mage with a full cohort of 100 lay assistants will barely manage a 10-yard radius.

Earthquakes

Earthquakes typically last only 2d × 5 turns. The main shock is often followed by aftershocks, usually of lesser intensity.

The Richter Scale is the most widely-known measure of intensity; the Mercalli Scale, which measures earthquake damage, is more useful for GMs. The scales can't be directly equated. Quakes below VII on the Mercalli Scale or 5 on the Richter Scale are rarely significant in direct mechanical terms, but their psychological and social impact can be substantial.

Earthquake Effects Table

Mercalli rating	Duration	Area	Extent	Fright check	DX roll	Effect
V	1 minute	Epicenter	25 miles	-	+4, only when moving	Felt by most people; wakes some. Some broken windows. Alarms ring, clocks stop. Tiny Earthquake spell.
VI	1 minute	10 miles	50 miles	+2	DX+2	Noticed by everyone; wakes most. Heavy items shift. Superficial damage such as falling plaster.
VII	1 minute	15 miles	30 miles	+0	DX	Unsecured items fall or overturn. Bells ring. Loose bricks fall, weaker structures crack. Falling debris 1d (3 in 6 indoors, 1 in 6 outdoors). Mild Earthquake spell.
VIII	1d minutes	25 miles	100 miles	-2	DX-2	Most buildings damaged; walls, towers and poorly-built structures collapse; branches break off trees. Falling debris 2d (4 in 6 indoors, 3 in 6 outdoors). Control roll for ground vehicles. Severe Earthquake spell.
IX	1d minutes	50 miles	200 miles	-4	DX-4	Buildings collapse; resistant structures badly damaged. Pipes and cables break, causing fires and spills. Falling debris 4d (5 in 6 indoors, 3 in 6 outdoors). Control roll at -2 for ground vehicles.
X or higher	2d minutes	75 miles	300 miles	−6	DX-6	All structures badly damaged; most collapse. Pipes and lines destroyed. Heavy objects thrown into the air with ST 20. Most roads and communications severed. Crushing debris 6d (11 in 12 indoors, 4 in 6 outdoors). Control roll at -4 for ground vehicles.

Area: Radius from the epicenter where the full effects are felt.

Extent: Maximum extent of the earthquake's effects. From the halfway mark, treat as two steps lower; from the three-quarter mark, treat as four steps lower.

Fright check: Where shown, a Fright check is needed, with a penalty of -1 to -5 for those on upper stories and other high places.

DX roll: Roll to avoid falling over, with a -2 penalty if moving, or -4 if climbing or running.

Falling object damage: Characters indoors, or in built-up or forested areas, are at risk of injury. Adjust as appropriate for unusual environments or particularly nasty (or harmless) debris.

> *We learn geology the morning after the earthquake, on ghastly diagrams of cloven mountains, upheaved plains and the dry bed of the sea.*
>
> — Ralph Waldo Emerson, *"The Conduct of Life"*

Avalanches and Landslides

Landslides can be caused by seismic activity, erosion, excessive rainfall, or mischievous earth mages. They typically move at 10 to 35 (5d+5) mph; given warning and luck, it's possible to outrun a landslide and reach safe ground.

Other options are Climbing (if a sturdy structure is nearby) or Dodge (if close to the outside edge). A really good Acrobatics or Surfing roll might allow characters to 'ride the wave', though this is best kept for cinematic games.

The figures above are typical of "mudslides" and "lahars", normally caused by heavy rain; they can reach as much as 80 mph. Some landslides are much faster. Debris avalanches, caused by unstable slopes collapsing, can reach 100 yards per second (200 mph)!

The rules on p. B431 aren't designed for being swept away by thousands of tons of rock covering a large area, and calculating the HP of a landslide is excessive. Instead, use the following values; for snow and soft mud, halve damage.

Shallow slide: Debris no more than knee-high, HP 20. If you fail to resist falling over from knockback by 5 or more, you are buried.

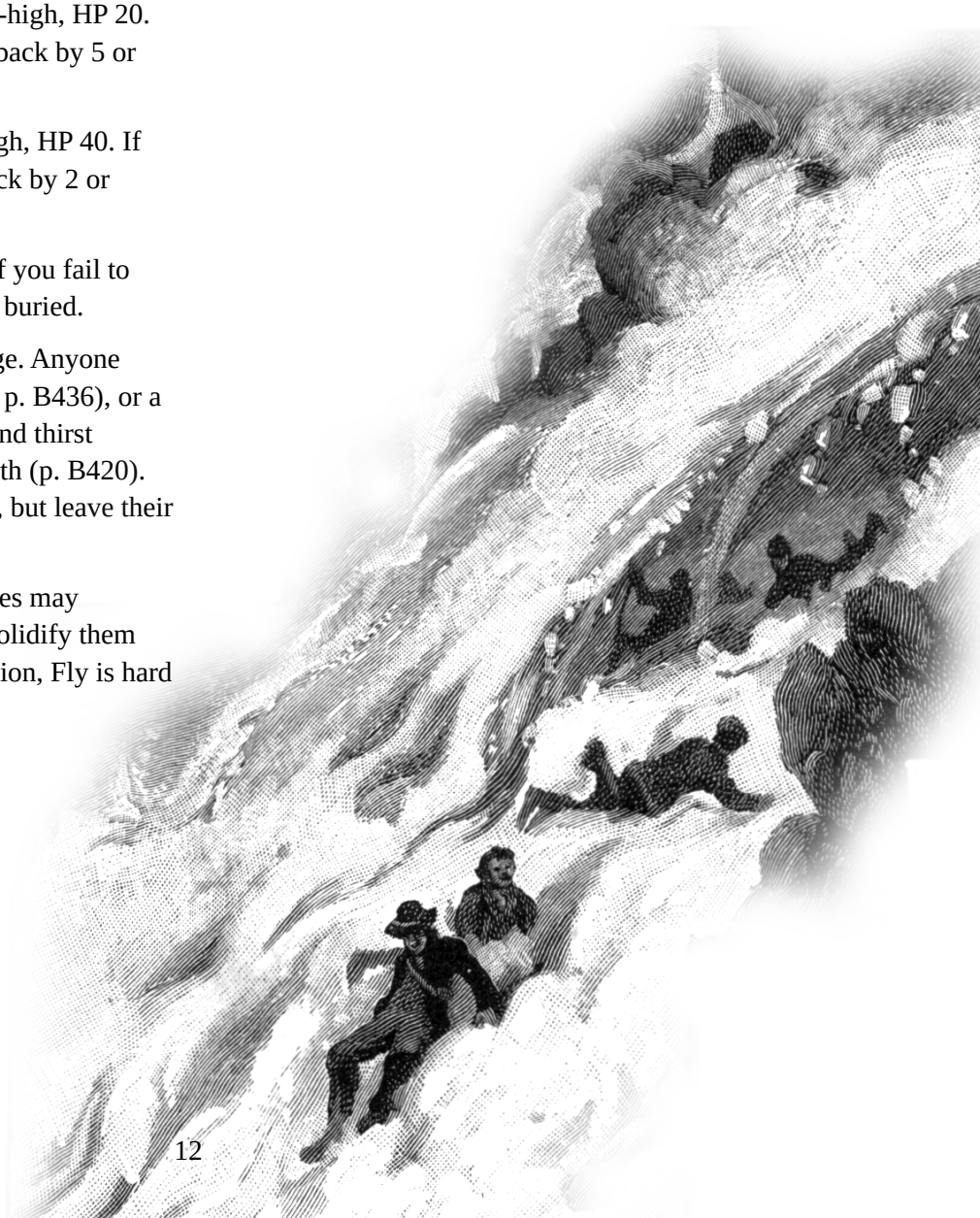
Average slide: Waist-high to shoulder-high, HP 40. If you fail to resist falling over from knockback by 2 or more, you are buried.

Deep slide: Head-high or taller, HP 60. If you fail to resist falling over from knockback, you are buried.

Surviving the impact is only the first stage. Anyone buried by a landslide faces suffocation (see p. B436), or a slower death from cold (p. B430), hunger and thirst (p. B426). If injured, they may bleed to death (p. B420). Vehicles and shelters offer some protection, but leave their occupants trapped inside.

To protect others against landslides, mages may stabilize the slopes with Anchor Scree, or solidify them with Earth to Stone. For pure self-preservation, Fly is hard to beat!

> *With a mighty roar a thousand tons of snow and rock broke loose. Tearing up trees as if they had been so much brushwood, the mass thundered down the slope towards the ice. Algy stared like a man stunned, gazing blankly at the confused jumble of snow, ice, rock, and timber as the avalanche swept past them, swirling and tossing like water in a ravine flooded by a cloudburst. Dimly he was conscious of a great noise without actually hearing it. He reeled under the suddenness of the calamity. The scene was engraved on his mind like a photograph.*
>
> W. E. Johns — *"Biggles Sees it Through"*



Volcanoes

Volcanoes threaten human life in numerous ways. Pyroclastic flows are the deadliest; waves of gas and ash that can reach 1090°C (2,000°F), racing at 400 mph. Pompeii, Herculaneum and other cities were destroyed in this way, with people sheltering indoors killed instantly through thermal shock.

Lahar mudflows can be hundreds of yards wide and deep, with enough force to carve new channels in the earth and demolish cities. Lava flows are slow, but bury areas under solid rock. Eruptions can hurl debris for several miles. Volcanic ash may collapse roofs, bury settlements, and choke aircraft engines.

GURPS Atomic Horror (p. 106) has simple rules for volcanic eruptions.

Weather Dome can repel volcanic ash, making it useful for those far enough away to escape other dangers. An Atmosphere Dome or Windstorm might block pyroclastic flow, at the GM's discretion. A sufficiently powerful Wind spell can blow away gases. A skilled caster might halt an imminent pyroclastic flow with a well-timed and potent Destroy Air, protecting an entire region.

A Force Dome protects against most volcanic hazards, but the dome itself might be buried. Resist Fire explicitly protects against volcanic heat (at double cost). Earth to Air *can* get rid of pesky lava flows (or at least create a safe passage through them) while Shape Earth could redirect them. Against falling debris, use ordinary defensive spells.

Sacrifice to the Volcano God

Natural hazards affect large areas, and mages may need to operate on the same scale. Governments and community leaders want people, land and infrastructure protected.

Seismic and volcanic hazards are devastating, huge, and generally occur repeatedly in the same places. This makes them perfect fodder for ceremonial magic (***GURPS Magic,*** p. 12). Ceremonial casting can alleviate the challenges of casting spells over a very large area; communities will find it worthwhile to invest in long-term protection; and the extended casting time isn't a problem.

Elaborate protective rituals are very appropriate for these situations. Consider making full use of the various *Mandatory and Significant Modifiers* offered in ***GURPS Thaumatology*** (p. 82); a society dwelling in the shadow of a volcano may have numerous specialists interpreting signs and planning the right elements for each day's ritual.

Sacrifices (***GURPS Thaumatology,*** p. 54) are appropriate, even in societies which otherwise forbid them in magic. Historically these rituals tended to be religious, making clerical magic (***GURPS Thaumatology,*** p. 65) likely; the rituals may be sustained throughout the year by the constant prayers of a nearby temple.

For an Area spell, it costs 1,760 increments to cover a 1-mile radius. For region-wide or nationwide protective spells, the casting cost is huge, but *proportionally* cheaper. Even if all a nation's spellcasters are conscripted for the attempt, alternative energy sources (such as sacrifices) will be essential. At these scales, a moderate tithe on livestock or produce should provide enough energy: using the rules in ***GURPS Fantasy*** (p. 165), a tithe of one sheep per twenty square miles would provide enough FP for a single mage to protect a 100-mile radius with Tectonic Quieting for a month.

Earthen Entities

Earth creatures fall into two main categories: creatures *made* of earth, and spirits of the earth.

Born of Earth

Earth elementals are composed of raw earth and rock, without a metabolism or organs; their life is supernatural, not scientific. Elementals might be treated as spirits (as in the Spirit Empathy advantage) or as a class of their own. Gargoyles, obsidian jaguars (***DFRPG Monsters,*** p. 43), rock mites (***DFRPG Monsters,*** p. 47), and even golems of clay, earth and stone might count as elementals and be vulnerable to Command Elemental.

In contrast, silicon-based species are living creatures with alternative metabolisms and biochemistry, such as the crystalloid (***GURPS Underground Adventures,*** p. 30) or Discworld troll. Spells designed to affect elementals don't work on them. In a campaign setting where silicon creatures are common, variant spells might exist for them – particularly Body Control, Healing and Mind Control spells. Animal spells might affect nonsapient silicon life; so might computer-controlling magic! Alternatively, apply the physiology modifiers (p. B181) to such spells.

Types of earth creatures

In a setting where earth-based creatures are widespread, they may have varieties that resemble specific types of earth or rock. A Geology roll can identify these and reveal their unusual properties. Some suggestions:

Soil: Vulnerable to high-pressure water. Water Jet spells, fire hoses and similar deal crushing damage equal to half of the knockback they inflict. Very heavy rain or immersion may also inflict damage.

Clay: Damage from heat or fire hardens the creature's body. For every 5 points of basic damage, *reduce* the creature's DX by 1, but *gain* 1 point of semi-ablative DR.

Sand: Burning (fire) damage that cripples any body part also has the effects of a Partial Vitrification spell (***Pyramid #3/114,*** p. 18).

Chalk: DR is half that of normal stone. Corrosion damage bypasses DR entirely, in addition to its normal effects.

Limestone: Corrosion damage bypasses DR entirely, in addition to its normal effects.

Slate: Can be split deeply by skillful blows. An attacker can assess the creature with a Masonry roll as part of an Evaluate maneuver; if successful, the attack that benefits from Evaluate *also* ignores the benefits of Homogenous (if impaling or piercing) or increases its wounding modifier from ×1.5 to ×2 (if cutting).

Pumice: DR is half that of normal stone. Highly buoyant.

Quartz: Piezoelectric. Immunity to Metabolic Hazards *doesn't* include the effects of electric shock. Frequently has electrical abilities.

> *'These strange formations seem to be all over this part of the planet's surface. Don't ask me why, but they worry me.'*
>
> *'Now, Ray, don't let your imagination run riot... my first impression is that when the crust of the planet was very thin , it was struck by meteorites. As the meteorite punctured the shell, so the hot rock exuded onto the planet's surface. Like toothpaste out of a tube.'*
>
> *'Good theory, Tony. Now explain to me how the exuding rock wrapped itself into a coil.'*
>
> *'You know, Ray, you've got a point.'*
>
> Gerry Anderson — *"Thunderbirds Are Go"*

Spirits of Earth

Spirits are immaterial supernatural beings, though many can assume material forms.

The Greek oreads and speleids (***GURPS Underground Adventures,*** p. 27) are particularly associated with mountains and caves respectively. More obscure spirits are the auloniads (mountain valleys), eleionomoi (swamps), and potentially the dactyloi (earth) and telchines (underground). A setting with widespread earth spirits might include a desert equivalent, the eremonomoi.

All these spirits use the Nymph meta-trait in ***Underground Adventures*** (p. 27) and can be customized to suit their preferred environment. The *Spirits of Place* entry (***GURPS Fantasy,*** p. 45) may be useful. The speleid presented below differs from that in ***Underground Adventures*** for consistency with the other variants.

Use Sense Earth Spirit (p. 37), rather than Sense Spirit (***Magic,*** p. 149), to locate these entities. Relevant spells are largely in the Necromantic college; consider allowing Earth spells as prerequisites.

Earth Nymph

241 points

Attribute Modifiers: DX+2 [40].

Secondary Characteristic Modifiers: Per+2 [10].

Advantages: Appearance (Beautiful) [12]; Magery 1 [15]; Nymph [191].

Perks: Honorary Title 6 [6].

Disadvantages: Dependency (Mana, Hourly) [-25]; Shyness (Mild) [-5].

Quirks: Prefers the Mana of Her Own Domain; Protective of Plants and Animals in Her Domain [-3].

Varieties

Eleionomos (+4 points): Amphibious [10]; Bad Smell (Swampy) [-10]; Distinctive Features (marsh scent) [-1]; Terrain Adaptation (Swamp) [5].

Eremonomos (+11 points): Immunity to Eye and Nose Irritants [1]; Protected Vision [5]; Supernatural Features (Bone Dry Skin and Swirling Dust) [-10]; Temperature Tolerance 5 (Cold and Heat) [10]; Terrain Adaptation (Desert) [5].

Oread (+14 points): Distinctive Features (stony appearance) [-1]; Perfect Balance (Footing Only, Not for Combat) [5]; Subsonic Speech [10]; Supernatural Features (No Body Heat) [-5]; Terrain Adaptation (Mountain) [5].

Speleid (+4 points): 3D Spatial Sense [10]; Distinctive Features (extreme pallor) [-1]; Disturbing Voice (Can Only Whisper) [-10]; Night Vision (Native illumination level -9) [0]; Terrain Adaptation (Underground) [5].

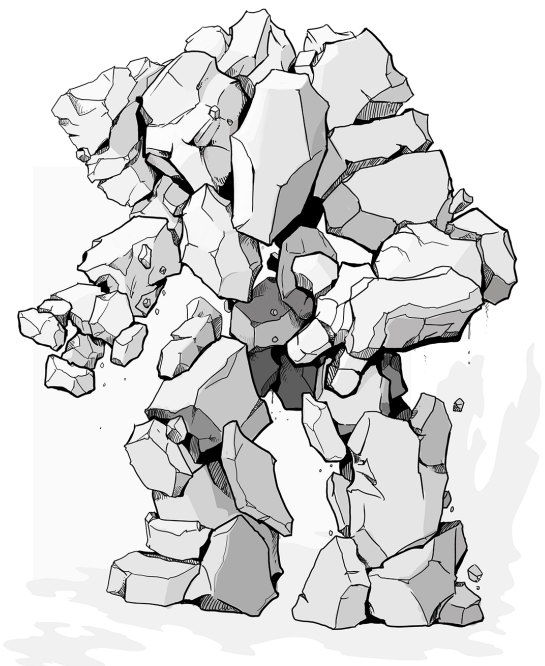
Alternative Earth Spirit Prerequisites

The following changes allow earth mages to interact with earth spirits without dabbling in necromancy, by learning a limited version of an existing spell based on Earth college prerequisites. The downside is that unless the mage also has the normal prerequisites, they can *only* use spells learned this way with earth spirits.

- Materialize Spirit: Earth Speech.
- Turn Spirit: Fear and Sense Spirit.
- Command Spirit: Earth Speech and Turn Spirit.
- Banish: Repel Earth and Turn Spirit.
- Entrap Spirit: Magery 1, Entombment and Turn Spirit.
- Repel Spirits: Banish and Turn Spirit.
- Bind Spirit: Command Spirit and Entombment.

Other Earth Beings

A third category fall somewhere between spirits and mortals. These might be considered a type of “fey” or “faery” creature. In medieval literature, “gnomes” and “kobolds” are terms for underground creatures that have uncanny powers over earth and stone, but have physical bodies and needs.



Magic of the Earth

Earth Magic and Others

The relationship between Earth magic and other schools depends on the campaign's treatment of magic and magic-users. Earth mages may be proud masters of fundamental magics, or grubby relics of a primitive and unglamorous era. The following are sample paradigms for the place and affiliations of Earth magic.

A School Perspective

Earth mages may see fire as a natural ally: igneous and metamorphic rocks are born of flames and heat, and fire shapes metal. In contrast, water and wind cause erosion and rust, and should be viewed with caution.

Plants rely on the earth for support and sustenance; this might inspire a parental affection, or contempt for an ephemeral and dependent existence that contrasts with timeless stone.

Since so many objects are products of earth, Making and Breaking is a natural extension of magic like Shape Earth and Alter Terrain. Plant magic might be viewed in the same way, with Purify Earth lending itself naturally to cultivation. Technological magic builds on both Earth and Making and Breaking; many spells relating to metal and magnetism could be placed in the College of Earth.

Magic dealing with ephemeral, intangible phenomena is the most unlike Earth magic. This covers schools like Communication and Empathy, Illusion and Creation, Light and Darkness, and Mind Control. Earth mages ignore these schools or even treat them with hostility.

The Primal and the Civilized

In another paradigm, Earth spells and other natural magic contrast with spells of artifice and manipulation. Druidism and witchcraft are often divided from scholarly magic, both in methods and philosophy.

A sample paradigm would see Air, Animal, Fire, Food, Healing, Plant, Water and Weather spells as 'primal' magic, while Communication and Empathy, Gate, Illusion and Creation, Making and Breaking, Mind Control, Protection and Warning, Sound and Technological spells would be the preserve of 'civilized' mages.

Other colleges fall between the two: both disciplines make use of Body Control and Movement in their own ways, while both might traditionally shun Necromantic spells – at least officially.

Matter and Mind

In a setting with widespread psionics or mental powers, Earth magic and its relatives may be seen as crude and low-status, dealing with primitive matter rather than the mind. The typical earth mage is a grubby counterpart to the erudite and sophisticated psi; perhaps even an atavistic menace that threatens to drag humanity back to a more violent age.

Conversely, Earth mages might be salt-of-the-earth heroes dealing in tangible, trustworthy things; a stark contrast to the devious and horrifying ways of mentalists. This works equally well whether the psis and hypnotists are a sinister ruling class holding the population in thrall, or a lurking menace.

In this paradigm, as well as the classical elements, Food and Making and Breaking might be 'matter', while Body Control falls under 'mind'. Illusion and Creation might be split between the two.

Variant Magics

GURPS Underground Adventures (p. 14) discusses how subterranean magic might vary in mana, divine influence, and the potency of particular types of magic. The use of gemstones in magic is discussed in ***GURPS Thaumatology*** (p. 99). ***GURPS Fantasy*** (p. 43) introduces aspected mana: significant caves, impressive formations, and the homes of chthonian spirits might well be earth-aspected.

Material magic (***GURPS Thaumatology,*** p. 95) includes a range of rocks, gems, ores, and metals that can enhance spellcasting. An earth mage's apprenticeship might include studying the secrets of these stones; specialist studies in a wizardly school may do the same. Use an Extra Option perk (***GURPS Power-Ups 2: Perks,*** p. 20) to grant access to these rules, even if they aren't in common use in the campaign – perhaps limited to Earth spells only.

If using ritual space (***GURPS Thaumatology,*** p. 128) Earth mages may rely on mountain peaks, deep fissures, or crystal outcrops. The meeting-place of tectonic plates might attract seismic spirits, and unusual strata focus magic of time, shaping, or precious resources. Specialized cave mages might be *limited* to caverns for their rituals.

Power of the Land

In a setting where the land has a presence of its own, earth mages might receive Power Investiture (The Land), gaining a list of spells restricted to the Earth College and perhaps a few others. Finer detail is possible: Power Investiture (Australia) could add appropriate Animal, Knowledge and Weather spells or secret variants. In a campaign of rival kingdoms, each realm might bestow its own unique power on patriotic mages or those of royal blood, granting spells that resonate with its culture and geography.

Magic of Other Earths

Earth magic is deeply tied to the fundamental matter of the world. This might mean Earth magic works *differently* on different planets, parallel worlds, alternate dimensions and supernatural realms.

If specialization by world is required, Earth magic can become very costly. Mages may focus on a small number of spells, either boosting their skill to overcome penalties, or buying the most useful spells for multiple specializations.

With variant magic, this isn't necessarily the case. Ritual magic (p. B242) has only a single skill per College, so buying Earth College (Terra) and Earth College (Mars) isn't such a problem. Power Investiture can be used in the same way, representing a special bond to the mage's homeworld – particularly appropriate in a setting with Gaia-like worlds with a life of their own.

To keep the flavor while limiting costs, use specialized Magery rather than spell specialization. The value of the limitation depends on how much time the characters are likely to spend in the chosen world, and how often they use magic there; use the Accessibility guidelines (p. B110). For a game where events take place largely in one world, -5% or less might be appropriate, with a -40% for Magery limited to the secondary world. A campaign split between numerous worlds could justify as much as -90%.

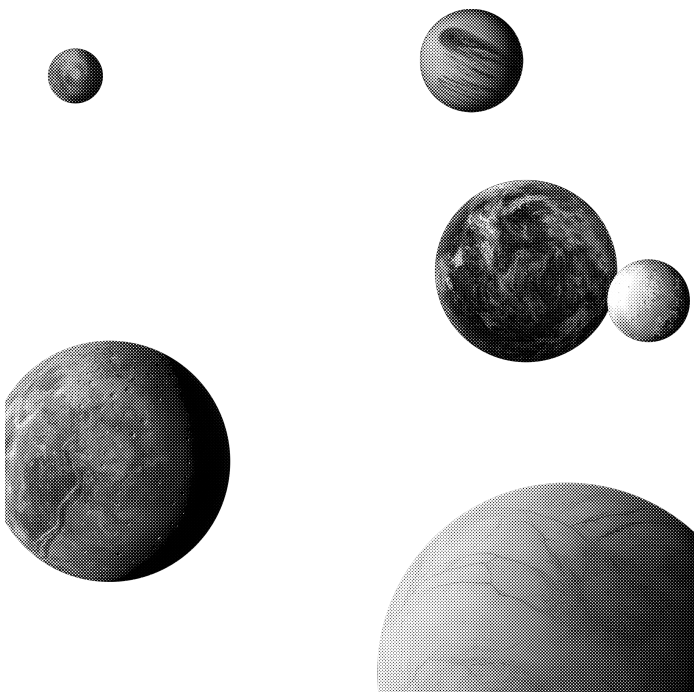
Planet Types

At the simplest level, Earth magic might require specialization by planet type (p. B180). Of the six types listed, only Earthlike, Hostile Terrestrial and Rock Worlds directly support this model. The others have little or no earth to work with; though of course, that might be the *reason* that specialization is required!

This approach is suitable for wide-ranging cinematic campaigns, where landing on an airless rock or a corrosive hell-world is as likely as a hospitable world. It's also thematic for a campaign featuring two major species with widely different ideas of habitability; mages from each faction are weakened on the homeworlds of the other, unless they study methods to adapt their magic. Obtaining those secrets might be a vital end-goal of diplomatic efforts for a stranded starship, colony, or a species forced to abandon its home planet.

For a space opera game with many habitable worlds, more categories may be required. Earth magic might depend on the dominant elements in the planet's soil, its seismic activity, or its geophysical composition.

If magic relies on spirits, a planet may have a particular *category* of spirits. These could be rival families, or species of spirit that have evolved and spread to different worlds. Perhaps several 'flavors' of earth spirits exist, and mages must learn the proper methods of working with them.



Unique World Magic

Another approach treats each world as a unique entity, requiring Earth magic specialization by planet. This is suited to a campaign based around a small number of worlds, where the cost of training spells in multiple specialties is capped: investigations across Earth and Mars, or a campaign shifting between the mortal realm, Faerie, and Hel.

Earth magic lends itself to construction and defense; planetary specializations can explain lone planets holding out against overwhelming forces, and species keeping to their own worlds (or terraforming uninhabited ones) rather than building cities alongside each other. In a

setting where caves really do lead to chthonian otherworlds, differences in the nature of Earth magic can explain how these borders persist.

Particular planets might color the magic of their mages, perhaps according to alchemical theory or to religion. Martian Magery could be war-aspected (as could Martian mana), and Venusian Magery particularly potent in casting spells of passion.

Earth Technology

As TL increases, artificial and semi-artificial materials become more widespread: asphalt, brick, clay, concrete, glass and so on. As ‘earth-like’ materials made from treated earth and stone, it makes sense to place these within the Earth college. In most cases, treat these materials as stone for the purpose of existing spells, such as Walk Through Earth.

At Tech Levels high enough to make these materials widespread, these may form one or more sub-colleges; Glass spells are presented as a sub-college of Earth magic in *Glass Magic and the Specularii* (***Pyramid #3/114,*** p. 17).

In campaigns where urban and wild environments are strongly contrasted, it may make sense to form a new college of Brick and Glass magic. In this case, Brick and Glass mages have their own versions of many Earth spells. They might even form a College of Artificial Materials, incorporating the Plastic spells otherwise placed in the College of Technology.

> *To say that concrete is everywhere is hardly an exaggeration. Despite the fact that we only began mass producing this mixture of sand, aggregates and cement just over a century ago, there are now more than 80 tonnes of concrete on this planet for every person alive – around 650 gigatonnes in total. To put that slightly meaningless number into perspective, it is considerably more than the combined weight of every single living thing on the planet: every cow, every tree, every human, plant, animal, bacterium and single-celled organism.*
>
> Ed Conway — *“Material World”*

Earth Mages

An *earth mage* is anyone who knows more Earth spells than spells of any other college, with a minimum of five Earth spells. Earth mages often have Spirit Empathy (Earth), Close to the Earth, or Earthwise (p. 21), and a disadvantage worth -10 points from the *Horny-Handed Sons of Soil* list (p. 23).

Earth mages have plenty to offer their neighbors. Purify Earth, Plough and Drystone Wall are invaluable to farmers. Mountain mages may rescue travelers and avalanche victims with Earth Vision and Shape Earth. A mage with Reinforce Tunnel and Trace Labyrinth is reassuring company for miners and explorers alike, and Tectonic Quieting will ensure a hearty welcome in any seismically-active region. To civil authorities, the mage's landscaping and engineering talents are an asset to society, while the military appreciate the ability to raise and bypass fortifications.

Despite its rustic associations, the College of Earth remains relevant at higher TLs. During industrialization, it locates fossil fuels and shapes metal for the engines of industry; it clears the way for road and rail by leveling hills and shaping tunnels. In the Computer Age, earth mages design silicon chips and repair the ravages of industrialization on the landscape; many expand into electronics and the Technological College. With rapid global communications, they mitigate natural disasters around the world. As humanity takes to the stars, they terraform new worlds, harvest asteroids, and communicate with silicon-based lifeforms.

The Making of an Earth Mage

Earth mages should consider Professional Skill (Digging) (p. 25) and/or Expert Skill (Excavation) (p. 25), alongside such staples as Geology, Masonry, and Climbing. Engineer (Mining) and Prospecting suit mages interested in the earth's resources, while Farming fits one who nourishes the earth. Mages who prefer remote caves and mountains should take Climbing, Survival, and perhaps Meditation. Metal mages want Metallurgy and Smith; add weapon skills at low TLs, and technological ones at higher TLs. Crafting mages add Artist (Pottery or Sculpture) and Jeweler.

In some settings, advanced earth mages begin to *think* like rocks. This would justify Hidebound (p. B138), Incurious (p. B140), Low Empathy (p. B142), No Sense of Humor (p. B146), and Unfazeable (p. B95). In extreme cases, Decreased Time Rate (p. B129) is appropriate.

For earth mages who *physically* gain the qualities of earth, consider Blindness (p. B124), No Sense of Smell/Taste (p. B146), and Numb (p. B146), coupled with the 0-point version of Subsonic Speech (p. B89). Complementary advantages are Doesn't Eat or Drink (p. B50), Doesn't Sleep (p. B50), High Pain Threshold (p. B59) and Unaging (p. B95). Body of Earth or Body of Stone are the logical conclusion for such mages. Mages with an affinity for silicon or metal may take Electrical (p. B134).

Facets of Earth Magic

The College of Earth is one of the wider schools, covering spells that alter the landscape; create or overcome barriers; assail enemies; guide and aid travelers; make everyday tasks easier; guard against disasters; and more. Any given Earth mage is likely to tailor their spells to a particular role. Some examples follow.

Agricultural Wizards

Earth magic is immensely useful for farming communities. Wizards of soil and seed learn Break Rock, Essential Earth, Plough, Purify Earth, Ram Earth, Shape Earth, and Till Earth. Most also study Plant spells: see *Crops* (***GURPS Magic: Plant Spells,*** p. 4) for suggestions.

Earthworkers

These wizards specialize in landscaping and hazard prevention. They flatten land for building and raise defensive ramparts, dig irrigation networks, and evaluate and intercept seismic hazards. Earthworkers tend to know Alter Terrain, Assess Land Stability, Drystone Wall, Earth to Stone, Ground Map, Predict Earth Movement, Reinforce Tunnel, Shape Earth, Tectonic Quieting, and Tremor Sense. The Dormant Volcano technique is useful.

Excavators

The depths of the earth hold precious minerals and ores, buried hoards, and valuable rarities. Wizards who delve for treasure study Earth Vision, Ground Map, Reinforce Tunnel, Repel Earth, Seek Earth, Seek Landform, Shape Earth, Surface Gravity, and Walk Through Earth.

Knowledge spells such as Measurement and History are popular. The Plant college offers Searching Roots for those for those willing to invest in its prerequisites, or the Root Animator perk (p. 26).

Guides

Aided by an array of spells for navigating and negotiating terrain, Earth mages make natural guides and explorers. They learn Anchor Scree, Break Rock, Create Earth, Create Path, Ground Map, Lodestone, Predict Earth Movement, Rock Dodging, Seek Landform, and Seek Pass. Water and Weather spells are likely accompaniments.

Researchers

Fossils and ruins linger under the surface. Wizards who hope to uncover these secrets study Earth Vision, Gemstone Lens, Keystone, Mother Lode, Restore Stone, Seek Earth, Seek Fossil, Settle Dust, and Surface Gravity.

War Wizards

For those seeking military might, the College of Earth has plenty to offer. Soldier-wizards learn Earthquake, Entombment, Fissure, Flesh to Stone, Pyroclastic Flow, Rain of Stones, Rock Burst, Sandstorm, Steelwraith, Stone Missile, and Stone to Earth. Ground Map offers tactical insight, while Surface Gravity deals with traps and mines. Create Path is helpful for armies on the march.

Advantages

For exotic and supernatural advantages, the Divine, Magic or Spirit origins are most appropriate to an Earth mage.

Absolute Direction

see p. B34

Limit this advantage to specific terrains to represent desert, mountain or cave mages using Accessibility, Only underground (-30%) and so on. If the campaign is restricted to those terrains, this isn't a limitation!

Channeling

see p. B41

Earth mages and others with chthonian sympathies may have a limited form of this advantage, which only affects earth spirits. Add Specialized, Earth spirits (-50%).

Magery

see p. B66

In a campaign set primarily underground or in surroundings of earth and unworked stone, the GM may wish to change the value of One College Only (Earth) from -40% to -20%. This is a major change from the standard rules, but it makes sense for campaigns where Earth magic is always relevant. In the opposite case – maritime campaigns or airship cities – the GM may change the One College Only value to -60%. Use -60% for campaigns restricted to highly artificial environments, such as submarines, spaceships, or ultra-tech cities where actual earth is scarce.

Medium

see p. B68

As Channeling, above.

Night Vision

see p. B71

A cave mage who dwells primarily underground may be allowed to alter their native light level, using the rules in ***GURPS Underground Adventures,*** p.18. Allowing 1-2 levels may be reasonable for long-term human acclimation. For more significant changes, require an Unusual Background or Special Exercises.

Perfect Balance

see p. B74

This advantage is ideal for mountain mages, but the bonus on slippery and unstable surfaces is also useful in caves, swamps and deserts. This bonus applies to moving safely over scree.

Psychometry

see p. B78

Lacking emotion, rocks and earth don't retain emotional charge as well as more human environments.

Rocks can potentially reveal impressions from *millions* of years ago. However, rocks perceive time dimly and slowly. Psychometry typically reveals long-lasting events or patterns, such as the regular passage of travelers or the gradual erosion of ruins. This can be helpful in revealing well-established trails and hidden entrances. Optionally, the GM may reduce the penalties for timescale in exchange for this loss of detail. See the Prehistory spells (***GURPS Magic,*** p. 106) for a possible model.

Soil or sand is more ephemeral, and readily yields impressions of recent events, especially those that disturbed it. One impression it does retain well is that of burials and excavations; both corpses and treasures attract strong emotion. The emotional echoes of ancient cities may seep out through the sand that covers them.

> *What are men to rocks and mountains?*
>
> Jane Austen — *"Pride and Prejudice"*

Sensitive Touch

see p. B83

The bonus applies when using Cane Travel (***GURPS Underground Adventures,*** p. 21) to navigate. Earth mages might learn to sense faint tremors.

Spirit Empathy

see p. B88

With the Specialized, Earth spirits (-50%) limitation, this is a cheap and useful talent for Earth mages intending to dabble with spirits. If the setting treats elementals as spirits, this also helps Earth mages to negotiate with the elementals they summon – and those of their enemies.

Subsonic Hearing and Subsonic Speech

see p. B89

These advantages are thematic for an Earth mage, particularly cave and seismic mages. In settings where earth spirits converse through tremors, they may be essential for advanced mages. In campaigns where these traits are not available to player characters, the GM should consider permitting them to Earth mages via an Unusual Background.

Talent

see p. B89

Cemetery Skulker: Expert Skill (Thanatology), Forced Entry, Professional Skill (Digging), Search, Stealth. *Reaction bonus:* Graverobbers, body snatchers, ghouls, vampire hunters and others who share your interest. *Alternative benefit:* +1/level on Navigation rolls within cemeteries and tombs, and on Fright checks from seeing *old* corpses (but not the undead). *Cost:* 5 points/level.

Desert Digger: Archaeology, Expert Skill (Excavation), Navigation (Land), Professional Skill (Digging), Survival (Desert). *Reaction bonus:* Archaeologists, lost travelers, history buffs. *Alternative benefit:* +1/level on rolls to decipher and read out ancient inscriptions in relevant languages (but not to *understand* them). *Cost:* 5 points/level.

Earthwise: Engineer (Mining)/TL, Expert Skill (Excavation), Geology/TL, Hobby Skill (Rock Collecting), Masonry, Professional Skill (Digging). *Reaction bonus:* Farmers, miners, and others who work with soil and rock. *Alternative benefit:* +1/level on Tracking rolls on earth and stone and on Farming rolls relating to the earth. *Cost:* 5 points/level.

Eye for Gemstones: Esoteric Medicine (Crystal Healing), Geology/TL, Jeweler, Merchant (Gemstones), Prospector, Symbol Drawing (Gemcutting). *Reaction bonus:* Jewelers, rock collectors, clients, jewelry enthusiasts. *Cost:* 5 points/level. *Alternative* Cost: 6 points/level.

Natural Caver: Breath Control, Climbing, Escape, Naturalist, Navigation (Underground). *Reaction bonus:* Fellow cavers, cave-dwellers and speleids. *Alternative benefit:* +1/level on HT rolls to resist underground hazards. *Cost:* 5 points/level.

Pickaxe Penchant: Professional Skill (Digging) should fall under this Talent, bringing the total to 6 skills for 5 points. See ***GURPS Dungeon Fantasy 3,*** p. 6.

Smith: Armoury (Body Armor, Melee Weapons), Artist (Metal sculpture)*, Connoisseur (Metalwork), Hidden Lore (Fire and Iron), Jeweler, Metallurgy, Smith. *Reaction bonus:* Clients and other artisans; in low-tech societies, others of 'secret' professions. *Alternative benefit:* +1/level on HT rolls to resist heat. *Cost:* 5 points/level. *Alternative* Cost: 7 points/level.

*an optional speciality, bringing difficulty down to IQ/A.

Temperature Tolerance

see p. B93

Temperatures on mountain peaks and in deep tunnels can reach deadly extremes. In a realistic campaign, use Unusual Backgrounds or the Special Exercises perk to let Earth mages exceed the normal limits of this trait, particularly for volcano mages.

Terrain Adaptation

see p. B93

The 0-point version of this trait can represent habituation or supernatural attunement to mountains, deserts or marshland. Even in a realistic campaign, human Earth mages with an appropriate specialization should be allowed to take it.

Unusual Background (Chthonian Encounters)

5 points

You ventured deep beneath the earth, where you encountered strange underground phenomena and chthonian beings. You can learn Hidden Lore (Chthonian) in play. You may learn spells of the Earth college, as well as the Earth Talent and Abilities (***GURPS Powers,*** p. 126). If you could already learn one or more of these categories, you instead gain a cumulative +1 bonus on Fright Checks caused by underground phenomena or chthonian creatures.

This background could represent dwarven secrets, the blessing of earth spirits or the effects of unknown deep earth minerals.

Consider adding a complimentary trait to reflect your encounters, such as an Ally, Enemy, Obsession or Phobia.

Unusual Background (Earth Spirit's Disciple)

5 points

Prerequisites: Any relevant Code of Honor, such as Marsh Guardian (p. 23), or Sense of Duty (Nature).

You have befriended a spirit of earth, or been accepted as their pupil, and learned some of the mysteries of earth. Choose one of the earth spirits listed in Spirits of Earth (p. 15). This gives you the following benefits: You can rest in that spirit's native terrain as comfortably as in a feather bed; you can acquire Terrain Adaptation to the spirit's native terrain in play; and you may use the Training Sequence rules in ***GURPS Martial Arts*** (p. 147) to learn Earth spells.

You gain additional benefits based on the chosen spirit:

Eleionomos: You can acquire Absolute Direction and Terrain Adaptation (Bogs & Marshes) in play. You can learn Light Walk without meeting the prerequisites; you gain its benefits only in bogs and marshland, unless you also meet the normal prerequisites.

Eremonomos: You can acquire Absolute Direction, Reduced Consumption (Water only), and Temperature Tolerance in play. You can learn Light Walk without meeting the prerequisites; you gain its benefits only in deserts, unless you also meet the normal prerequisites.

Oread: You can acquire Perfect Balance and Temperature Tolerance in play. You can acquire Terrain Adaptation for any mountainous terrains (such as Rocky, Ice, Snow and Scree) in play. You can learn Lizard Climb as though you had the Trained By A Master advantage.

Speleid: You can acquire Night Vision during play, including altering your native Night Vision (Underground Adventures, p. 18). You can acquire Resistant (Occasional, respiratory poisons) and Detect (Rare, damps) during play, representing miners' "damps" (***GURPS Underground Adventures,*** p. 18), ammonia from bat guano and similar hazards. You can acquire Temperature Tolerance in play.

Consider adding a complimentary Secret or Reputation to reflect your special relationship. If the GM desires, this trait may be a prerequisite for earth-mage perks (p. 25).

Unusual Background (Initiate of Liminal Mysteries)

Varies

Prerequisites: Disciplines of Faith (Liminalism), and at least 2 points in spells from each of the colleges appropriate to your chosen borders.

You've been trained in the mysteries of liminal spaces, and the rituals that maintain borders or allow safe passage through them. This gives the ability to acquire certain traits in play based on the borders you venerate. A universal liminal faith may encompass all of these. Regardless of tradition, you may acquire Spirit Empathy in play. Each tradition permits further learning:

Cave Mouths: borders between the surface world and the underworld (Earth, Light and Darkness). You can acquire Absolute Direction in play, and you can learn a limited form of Blind Fighting, usable only to compensate for darkness.

Cliffs: borders between the earth and the sky (Air, Earth). You can acquire Perfect Balance and Peripheral Vision in play. The latter applies *vertically,* allowing you to see above and below more effectively.

Shores: borders between the land and the water (Earth, Water). You can acquire Amphibious and Breath-Holding in play.

More unusual liminal traditions might revere borders between the city and the wild, the home and the outside, or the starship and the void. Consider adding an appropriate Secret or Stigma (if your tradition is unusual), or a Reputation or Status (if it is widespread).

Disadvantages

Any negative reaction to earth, stone, and potentially metal, is a challenge for an earth mage. This includes mysophobia (p. B149), as well as Vulnerability (p. B161), Dread (p. B133) or Revulsion (p. B151) to these substances. Other Phobias are unsuitable for particular themes: darkness and enclosed spaces (cave mages), heights (mountain mages), and open spaces (mountain and desert mages).

The GM may rule that casting rolls are penalized by -1 for every full -5 points in the sum of these traits.

Code of Honor

see p. B127

Cavern Keeper: Defend natural caves and rock formations from those who attempt to harm or destroy them by mining, destructive redevelopment, or other means. Keep the secrets of the underground and chthonian spirits. Use underground resources in a respectful way. Show respect toward those dedicated to the caves. Oppose the idea of things underground as a possession, owned by any individual, country, or institution. *-10 points.*

Desert Protector: Watch over the fragile ecosystems of the desert and the creatures that dwell within it. Oppose those who threaten the deserts by carelessness or over-exploitation. Respect the spirits of the desert and their ways. Aid those who travel and dwell in the desert in times of need. Take only what you must, and give freely to others so they may survive. *-10 points.*

Earth Warden: Nurture the living soil and the processes that maintain it. Teach others to sustainably enjoy its riches. Resist desertification, soil erosion and similar harms. Protect the earth from poisoning and destruction, and oppose those who do so. Respect the spirits of the earth, and those who use it respectfully. *-10 points.*

Marsh Guardian: Defend bogs and marshes from those who would harm them through draining or excess harvesting. Use their resources sustainably and without collateral harm. Preserve their secrets and legends. Respect the spirits and inhabitants of the marsh. Oppose the idea of the marsh as a possession, owned by any individual, country, or institution. *-10 points.*

> *They lay close to the earth, and something of earth's old fierce simplicities had seeped into their beings.*
>
> — Stella Gibbons, *"Cold Comfort Farm"*

Horny-Handed Sons of Soil

For earth mages who broadly respect natural formations, use a quirk: "Cannot tolerate extensive damage to earth and stone formations." Another quirk, "Insists on floors of natural earth and stone" can represent druidic earth mages, a belief that it aids magic, or an aesthetic fixation. Superstitious mages might have "Prays to fossils" or "Only bathes in sand" as quirks.

Mages with a more personal connection have one of the following instead: Code of Honor (Caver's) [-1], Code of Honor (Mountaineer's) [-1], Compulsive Behavior (Collecting pebbles) [-5], Odious Personal Habit (Always muddy) [-5], Odious Personal Habit (Ritually eats earth) [-5], Sense of Duty (Earth spirits) [-5].

Mages with a reverence for the earth take things a step further. They have one of the disadvantages above and one or more of the following: Code of Honor (Cavern Keeper) [-10], Code of Honor (Desert Protector) [-10], Code of Honor (Earth Warden) [-10], Code of Honor (Marsh Guardian) [-10], Intolerance (Miners and prospectors, at any TL) [-5], Phobia (Open water) [-10], Vow (Live in caves for at least six months of the year) [-15] *(or desert, marsh, or mountains as appropriate),* Vow (Walk barefoot on earth and stone) [-5]. For cave mages, Phobia (Open spaces) [-10] or Phobia (Heights) [-10] are also appropriate.

At higher TLs, earth mages may object to synthetic materials covering the land. Options range from formal complaints in planning meetings, to a Vow (Never travel on tarmacked roads) [-5], to destroying highways and concrete parking lots; the GM should determine suitable costs in keeping with the campaign. Others embrace these as extensions of Earth magic; see *Asphalt, Brick, Concrete and Glass Spells* (p. 46).

Compulsive Behavior

see p. B128

Collecting Pebbles: Wherever you go, you feel the urge to pick up stones and study them – even if it involves trespassing. Your pockets clatter with your latest acquisitions, and you fidget with them at inappropriate times. You get a reaction penalty (-1 per -5 points in this disadvantage after the self-control multiplier) from teachers, business associates, and high society, but a +1 from geologists. This also gives a -1 on Stealth, Disguise,

and Shadowing rolls, and a +1 on rolls to identify you. You *always* have a few pebbles to hand. *−5 points.*

Disciplines of Faith

see p. B132

Liminalism: You offer prayers or sacrifice at least once per day in a place of transition (such as a cave mouth, lakeside or clifftop). You use ritual gestures and phrases whenever you transition between 'worlds', such as entering a cellar or swimming pool, or even the basement floors of a store. Individuals other than co-religionists who observe you find this peculiar, and react at -2. *−5 points*.

Lifebane

see p. B142

The Lifebane disadvantage will kill fungi, microbes and insects in the soil you walk over, preventing decomposition of organic matter and reducing its fertility. Long-term exposure renders soil worthless. It takes approximately a year for the soil to recover, though Purify Earth or Essential Earth can restore it.

Phobia

see p. B148

A cave mage might reasonably have Phobia (Heights), Phobia (Open Spaces), or even Phobia (Sun). Any specialist earth mage can justify Phobia (Oceans) and Phobia (Flying), since both severely hamper their magic.

Skills

Expert Skill†

see p. B193

The following skill is relevant to archaeologists, construction managers, emergency rescue professionals, mining engineers, and paleontologists. For hands-on work, see Professional Skill (Digging) (p. 25).

Excavation: Expertise in the techniques, logistics and hazards of excavation. A successful roll allows you to estimate time and material costs, determine the appropriate tools and techniques for digging in particular conditions, assess potential risks, brief a team, and identify or evaluate the work of others. Can be used in place of Administration or Leadership to coordinate staff for a long task (p. B346), instead of Geology or Prospecting to answer questions about digging conditions, and in place of Engineer/TL to answer questions about simple wells, earthworks and tunnels. At the GM's discretion, it may substitute for Biology or Naturalist when identifying burrows and organisms that affect digging conditions.

Modifiers: Equipment modifiers (p. B345); the time modifiers under *Extra Time* (p. B346) often apply.

Geology/TL†

see p. B198

In addition to its normal uses, this skill may reveal specific properties of creatures that are made of earth and stone: see *Born of Earth,* (p. 14). In a fantasy or supernatural campaign, it might act as Animal Handling for dealing with earthen beings of IQ 5 or less.

Hobby Skill

see p. B200

The following skill is DX/Easy and may play a role in liminal faiths as a bridge between land and water or a divinatory tool. More frequently, it's simply a pastime.

Skipping Stones: You can throw flat pebbles so they bounce across the water. This skill defaults to DX-4 or Throwing-2. Unlike Throwing, the goal is normally technique rather than accuracy. A Perception-based roll can be made to forage Good or Fine skipping stones that grant an equipment modifier. A suitable stone can skip a number of times equal to the margin of success + 1. Each skip travels 80% as far as the last. Use the rules on p. B355 to determine maximum throwing distance; a typical skipping stone has a distance modifier of 3.5.

If you have Hobby Skill (Skipping Stones) at DX+2 or better, *double* the margin of success when determining how many skips you can make.

To skip stones at a particular target, roll to hit separately, with a cumulative -1 per skip to both the skill roll and any damage inflicted.

Modifiers: Range modifiers (p. B550) for the initial throw; equipment modifiers if suitable stones are gathered (p. B345); aiming modifiers (p. B324); -1 to -5 for rough water. Skipping stones for fun is typically an Easy (+4) task.

Immovable Stance

see p. B201

Thematic for earth mages who want to share the resilience of mountains. If the skill has a supernatural origin, use Accessibility (Only on earth and stone, -20%). The One with Stone perk (p. 26) offers a route to learn this skill. Alternatively, learn Mountain Roots (p. 34).

Professional Skill†

see p. B215

The following skill is useful to earth mages, navvies, and adventurers. It's the practical complement to Expert Skill (Excavation) (p. 24).

Digging: This is the skill of effectively and safely shifting earth with hands or tools. It defaults to DX-5. A successful roll allows you to avoid damaging, triggering, or otherwise disturbing obstacles and buried items, to coordinate as part of a digging team, or to conceal evidence of digging.

This skill allows you to apply your strength and tools effectively when you dig. Roll once per shift of work. On a success, increase your Basic Lift by 5% per point by which you made your roll. This only affects your digging progress, not other uses of Basic Lift.

An IQ-based Digging roll can substitute for Engineer/TL3 or lower to design simple dug structures such as trenches or tunnels.

Modifiers: Equipment modifiers (p. B345); the time modifiers under *Extra Time* (p. B346) often apply.

Perks

Aerodynamic Pebbles‡

When you throw stones, reduce the distance modifier (p. B355) by one step per level in this perk (maximum 3 levels).

Better (Gear)†

see *GURPS Power-Ups 2: Perks,* p. 8

Access to superior jewelry, stone tools, or *simple* metal equipment can be explained by Earth magic – you buy the same gear as everyone else, but improve or maintain it with magic.

Cheaper (Gear)†

see *GURPS Power-Ups 2: Perks,* p. 8

As with Better Gear, Earth magic justifies cheaper access to stone and *simple* metal items. In this case, you focus on saving money: you buy cheap, low-quality items, then "magic them up" to standard.

Coal Connoisseur

You can tell fine coal from scrap lignite, and know how best to coax them into a fire. You get +2 to judge the quality of coal or peat, and when using them in a fire you built yourself, you can reduce the fuel needed (and associated costs) by 5%. If you work as a coal merchant, stoker, etc., you get +1 on job rolls (p. B516).

Cliff Catching

You gain a +1 bonus on rolls to avoid falling when climbing on earth and stone. You can learn Lizard Climb (Accessibility, only on solid earth and stone).

Earthshod Mage

You can go barefoot without suffering any special penalties or discomfort. You don't risk injury or infection from day-to-day activities. This is just DR 1 (Partial, Only on soles of feet, -40%; Tough skin, -40%).

Escaping Burial

See *Thaumatology: Chinese Elemental Powers,* p. 27.

False Fossil

You can leave faint impressions in stone as though it were clay. Useful for paleontological fraud, leaving messages, or carving your initials to impress a date.

Geosensitivity

You're particularly sensitive to vibrations in the ground. You can learn Sensitive Touch (Accessibility, Only on earth and stone, -20%).

Gold Dust

If you sacrifice a pinch of gold, your Conductive Dust spell creates a burst of gold dust. The superior conductivity increases damage to 1d+1 per point of energy. A pinch is 20 mg (0.0007 oz) with a typical value of $1. The gold must be in your hand as you cast the spell.

Mundane Magic

see *GURPS Thaumatology: Magical Styles,* p. 28

Versions of this perk useful to earth mages include Mountain Roots as Immovable Stance, Seek Earth as Prospecting/TL, Seek Landform as Navigation (Land), Shape Earth as Artist (Pottery or Sculpture), and Trace Labyrinth as Navigation (Underground).

Flint-Knapping: Through applied destruction, you can shape flint, obsidian, and similar stones into useful tools. You may substitute Break Rock for the Flint Knapping skill (***GURPS Lands out of Time***), and for Armoury/TL0 and Machinist/TL0 when making stone weaponry and tools.

One with Stone

You are as solid and unmoving as the rock you stand on. You gain +1 on DX rolls to avoid falling when you stand on solid earth and stone. You can learn Immovable Stance (Accessibility, only on solid earth and stone).

Ploughman's Blessing‡

For every level of this perk, you count as putting in 1 additional energy when you cast the following spells: Earth to Water (when used to create mud), Plough, Purify Earth, Till Earth. This doesn't reduce the *minimum* cost of the spell.

Root Animator

Prerequisite: 8 Earth spells, Magery 2.

You've incorporated methods of the Plant College into your magic. This perk allows you to meet the prerequisites of Searching Roots (***GURPS Magic: Plant Spells,*** p. 18) and to treat it as an Earth spell.

Stable Earth-Shaping‡

Each level of this perk grants +1 on Architecture rolls to create stable forms with Earth spells, such as Shape Earth.

Sure-Footed†

Important versions of this perk for Earth mages include Sure-Footed (Shifting) for gravel, sand, loose soil and scree; Sure-Footed (Soft) for mire, mud and quicksand; or Sure-Footed (Uneven) for hillsides and rocks.

The Earth Exhales‡

You can draw on the oxygen bound within the soil. Each level of this perk counts as a level of Breath-Holding when you're buried in earth, stone, and similar materials. At five levels, it acts as Doesn't Breathe (Only when buried in earthen materials) instead.

Trackless Stride†

Earth: You're so attuned to the soil that your feet leave no marks in it. This is a perk-level Unusual Background for Light Walk (Accessibility, Only on bare earth and stone, -20%). It can be treated as an Intuitive Cantrip (***GURPS Thaumatology: Magical Styles,*** p. 26) for the Earth or Movement colleges. Similar perks can be created for other terrains.

Quirks

Code of Honor

see p. B163

Diamond Merchant's: Ask not whence the stones flow; honor the deals you make; make the best of every gem; never cut in haste; value is a matter of opinion, but always assess a stone's quality honestly.

Mountaineer's: Take nothing except pictures; leave nothing except footprints; damage nothing and endanger none; use caches sparingly, and replenish them generously; help other climbers who get into trouble; warn those who act foolishly.

Prospector's: Defend your claim; respect the claims of others, and help them enforce their rights; whatever you find is yours; look after your own; water is life, and must be treasured.

Gemstone Greed

Something about precious stones speaks to the depths of your soul in a way money doesn't. You take -1 on skill rolls to resist distraction, temptation, bribery and so on when gems are involved, and others gain a +1 when they exploit your weakness.

> *He regarded the jewels with an avaricious love, a miserly complacence; and one might have thought that his eyes were little beads of jasper, set in his leathery face as in the smoky parchment cover of some olden book of doubtful magic.... Then, with a single cry of ecstasy, he leapt forward from the ledge, sinking almost to his knees in the shifting and tinkling and billowing gems. In great double handfuls, he lifted the flaming and scintillating stones and let them sift between his fingers, slowly and voluptuously, to fall with a light clash on the monstrous heap.*
>
> Clark Ashton Smith — *"The Weird of Avoosl Wuthoqquan"*

Meta-Traits

Animated Fossil

-152 points

Attribute Modifiers: IQ-2 [-40].

Advantages: Doesn't Breathe [20]; Doesn't Eat or Drink [10]; Doesn't Sleep [20]; DR 5 [25]; High Pain Threshold [10]; Immunity to Metabolic Hazards [30]; Immunity (All mind control) [30]; Indomitable [15]; Injury Tolerance (No Blood, No Brain, No Eyes, No Vitals, Unliving) [40]; Single-Minded [5]; Temperature Tolerance 10 [10]; Unaging [15]; Unfazeable [15]; Vacuum Support [5].

Disadvantages: Appearance (Monstrous; Universal, +25%) [-25]; Automaton [-85]; Cannot Learn [-30]; Dependency (Mana; common, constantly) [-50]; Fragile (Unnatural) [-50]; Mute [-25]; No Sense of Smell/Taste [-5]; Reprogrammable [-10]; Skinny [-5]; Social Stigma (Dead) [-20]; Unhealing (Total) [-30]; Wealth (Dead Broke) [-25].

Quirks: Cannot Float; Sexless. [-2]

Features: Affected by Control Zombie, Pentagram, Stone to Earth, Stone to Flesh (bone, in this case) and Turn Zombie; No mental skills; Skull has only 5 total DR.

Elemental Meta-Traits

Varies

Body of Brick: Your body is made of shifting bricks and mortar. Doesn't Breathe [20]; DR 5 [25]; DR 10 (Limited: Heat/Fire, -40%) [30]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Homogenous, No Blood) [45]; Pressure Support 3 [15]; Sealed [15]; Vacuum Support [5]; and Fragile (Brittle) [-15]. *170 points.*

Body of Coal: Your body is made of carbon; it will burn, but slowly. Doesn't Breathe [20]; DR 3 (Semi-Ablative) [12]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Damage Reduction 3 (Limited, Being on Fire), Homogenous, No Blood) [75]; Pressure Support 3 [15]; Sealed [15]; Vacuum Support [5]; and Fragile (Brittle, Combustible) [-20]. *152 points.*

Earth Spells

The spells in this book use all of the established rules in the ***Basic Set*** and ***GURPS Magic***. Except as noted, spells are found in ***GURPS Magic***. Additional guidelines follow.

Ingredients: Many Earth spells affect the earth around them, which is the only 'ingredient' necessary. Some (such as Elf-Shot and Resplendent Geode) require a specific sort of rock to work on; a mage may need to obtain these first using other Earth spells.

New Earth Spells

Anchor Scree

Area

Causes loose material (such as sand or scree) to stick together, stabilizing it and preventing it from giving way. Reduce any penalties for bad footing by one step. Collapsing terrain automatically passes stability rolls. The target material can be dug through as per hard soil, but otherwise remains as a solid mass. At the GM's discretion, this spell may also affect roof slates and tiles.

Duration: 1 minute.

Base cost: 3 to cast. Same cost to maintain.

Prerequisites: Glue or Shape Earth.

Item

Any. *Energy cost to create:* 200.

Animate Fossil

Regular

Identical in application and mechanics to Animation (***GURPS Magic,*** p. 150), this spell allows the caster to animate a fossil. Its attributes are based on those of the original body, as are its physical advantages and DX-based skills, and it gains the Animated Fossil template. It does not have the "soul," mental traits, IQ-based skills, or memories of the living creature. The GM will determine its exact abilities, as appropriate to the campaign.

Duration: The fossil remains animated until destroyed.

Cost: 6, multiplied by SM+1 for objects larger than human size. Half that to maintain.

Time to cast: 1 minute.

Prerequisites: Seek Fossil, and either Summon Spirit or Lend Vitality.

Assess Land Stability

Information; Area

Evaluates the composition and stability of a geological feature or area of ground. The caster learns whether the land in question is liable to collapse, subsidence, landslides, sinkholes, and similar structural failures, including the nature of the risk and an estimate of probability (such as "once per century", "at the slightest touch", or "during heavy rain"). He also learns major features of structure and composition that relate to stability, such as the presence of mine workings or landfill sites (but not their location).

Base cost: 1 (minimum 2).

Prerequisites: Seek Earth, and one of Find Weakness, Predict Earth Movement, or Sense Danger.

Item

(a) Staff, which must touch the land in question. *Energy cost to create:* 500. (b) Monocle, spectacles or telescope used to view the land at a distance. *Energy cost to create:* 600.

Bejewel

Regular

A handful of pebbles poured over the subject transforms into fine gemstone jewelry, worn appropriately. These grant a +3 bonus on reaction rolls from those impressed by wealth and elegance, and on Acting or Savoir-Faire rolls to convey high Status (in cultures where this is appropriate). Once any of the jewelry is removed, it all transforms back into ordinary pebbles. The caster must supply the pebbles.

Duration: 1 hour or until removed.

Cost: 3 to cast; 1 to maintain.

Prerequisites: Diamond Blade.

Item

Glove or handkerchief. *Energy cost to create:* 400.

Chalk Finger (A)

Special

Allows the caster to use a fingertip like a stick of chalk. Varying pressure can leave a line or a smear of chalk dust. With one second of concentration, the caster can change the color of chalk produced.

Duration: 1 minute; the chalk is as permanent as any other.

Cost: 1.

Create Ceramics

Regular

Creates a simple pottery object with which the caster is familiar – e.g., a bowl, vase, roof tile, lamp or clay oven. It cannot create a magical item or living creature. Ornamentation of any sort is limited to what the caster could achieve by hand.

Duration: Instantaneous.

Cost: 2 for every 5 pounds the created item weighs.

Time to cast: Equal to cost, in seconds.

Prerequisites: Magery 1, Create Earth, Create Fire, Shape Earth.

Item

Staff, wand, or jewelry. Usable only by mages. *Energy cost to create:* 200.

Create Path

Regular

Reshapes rough ground into a usable footpath, allowing it to act as a low-quality road (p. B351). The caster specifies the origin and destination, and approximate route. Minor vegetation shifts aside for the spell's duration; larger plants and obstacles are avoided. This spell alters earth terrain, and cannot forge a trail through undergrowth, deep snow, artificial debris, etc.

Duration: 1 hour.

Cost: 1 per 20 yards of length, multiplied by width (minimum 1). Double cost through bogs (p. 9), boulders, mire, scree, and other very difficult terrain. For double cost, create a high-quality road that is unaffected by rain (p. B351).

Time to cast: 1 minute.

Prerequisites: Magery 1, Create Earth, Shape Earth.

> *"...if it is of any interest to his lordship to have a nice, well-made road for the Army to march along tomorrow, then Mr Strange will be glad to conjure one up for him."*
>
> — Susanna Clarke, *"Jonathan Strange and Mr. Norrell"*

Crystal Field

Area; Resisted by Perception

Scatters glittering crystals across the ground, distracting sentient creatures and getting underfoot. Those who fail the Perception roll are dazzled and distracted, suffering -2 to IQ-based skills and Sense rolls. This penalty ends early if the subject's sight of the crystals is blocked (even for a second), or the crystals are destroyed. Successful resistance gives the subject immunity to the spell's effects for 30 seconds. After that, if they're still in the area and can see the crystals, they must make a new resistance roll.

Darkness penalties act as a *bonus* to the roll – in dim light, the crystals are difficult to see, so they're less distracting (unless the subject can see in the dark!). Anyone who is Greedy incurs a -2 penalty; on a critical failure, they abandon other activities to collect and admire the crystals, unless danger threatens.

The scattered gems give the area bad footing (unstable). Anyone running within the area must roll against DX to avoid falling over. Crampon boots are ineffective against this spell.

Duration: 1 minute.

Base cost: 3 to cast; same cost to maintain.

Time to cast: 5 seconds.

Prerequisites: Magery 1, Bejewel and Daze.

Item

A ring made entirely of crystal. *Energy cost to create:* 800.

Devitalize Earth

Area

Kills insects, fungi, and microorganisms within the soil, and depletes it of nutrients, to a depth of 4 yards. Affected soil is worthless for agriculture, and can't support living creatures – it's effectively nothing more than rock dust. The spell's effects are instantaneous, and last until the soil's fertility is replenished. Purify Earth at *double* cost can restore it to poor soil, and additional castings can improve it further.

Base cost: 2 to cast. Cannot be maintained; must be recast.

Prerequisites: Decay and Shape Earth.

Item

Staff, wand, or jewelry. *Energy cost to create:* 300 energy and $100 of pure salt.

Earth Spells for Everyone

Any mage can learn Earth college spells if he has the listed prerequisites. Most spells have four or more, forcing the mage to make a nontrivial investment in the college. The spells below are exceptions; they are useful, with a low prerequisite count.

Basic Spells: Badger Paws, Chalk Finger (p. 28), Gargoyle Skin, Pebble, Scatter Dust (p. 36), Seek Earth, Spotless Hands.

Needs Only Seek Earth: Shape Earth, Seek Fossil (p. 37), Seek Landform, Seek Pass, Sense Earth Spirit (p. 37).

Needs Only Chalk Finger: Dust Cloud (p. 30).

Needs Only Seek Earth and Shape Earth: Anchor Scree (p. 28), Break Rock, Diamond Blade (p. 30), Earth Vision, Ram Earth (p. 35), Spade Curse (p. 38), Yielding Earth (p. 41).

* Also requires Magery 1.

Diamond Blade

Regular

Temporarily transforms a small rock into a diamond-edged knife, able to cut through the hardest materials. The blade deals swing-2(2) cutting damage per second to slice through bars, chains, thin sheets of glass or metal, etc. The tip can be used for controlled etching of glass. The blade can be wielded in combat as an obsidian knife (p. B275).

Duration: 1 minute.

Cost: 1 to cast; 1 to maintain.

Prerequisites: Shape Earth.

Item

Any, typically a tattoo of diamond patterns. *Energy cost to create:* 150.

Drystone Wall

Regular

This spell assembles a sturdy low (3′ tall) wall composed of stacked, unmortared stones. Loose stones of suitable size within a half-mile are snatched away, reappearing piece by piece to create the wall. Its length is based on the amount of energy spent (see below). Once created, it functions like any other wall, and retains no trace of its magical origin.

Shapes more complex than a straightforward linear wall (such as a small dome, arch etc.) can be created with a successful Masonry, Architecture or appropriate Engineering/TL roll.

Unlike the walls that can be created using Shape Earth, a drystone wall is stable and remains standing after the spell concludes.

Duration: Instantaneous.

Cost: 5 for every 10 yards to create.

Time to cast: 3 minutes.

Prerequisites: Magery 2 and Shape Earth.

Item

Staff or hammer. Usable only by mages. The caster marks the intended length of the wall in the ground before activating the spell. *Energy cost to create:* 400.

Dust Cloud

Area

Causes exposed sand or earth to erupt in a choking cloud. Each second, creatures in the area must either shut their eyes or roll vs. HT to avoid being blinded for 1d turns. A Nictitating Membrane provides its usual benefits on this roll. Anyone opening their mouth to speak – or bite – must make an additional HT roll to avoid coughing and sneezing (see *Irritating Conditions*, p. B428) for 1d turns.

In windy conditions, the cloud disperses more rapidly; in very strong wind it may last only seconds.

This spell requires at least a handful of earth. Mages who favor it tend to note every houseplant they pass.

Duration: 5 minutes.

Base cost: 1. For double cost, the spell can be cast on mud.

Prerequisites: Chalk Finger or Sand Jet.

Item

(a) A handkerchief that is flapped as part of casting. *Energy cost to create:* 300. (b) An area may be permanently choked with dust at a cost of 20 per yard radius.

Elf-Shot

Regular

Causes a pebble to launch itself at a target as though hurled by a sling. The use of this spell is similar to Winged Knife, but the caster may cause a loose stone to fly at the target. Calculate the range for the spell using the distance from the caster to the stone (0 if he is holding it), but calculate the range for the attack using the distance from the stone to the target. Use Innate Attack (Projectile)

to hit. The stone has 1/2D 50, Max 100, Acc 0 and deals 1d piercing damage.

This spell can be used to skip stones instead of attack; in this case use a Hobby Skill (Skipping Stones) roll instead.

Duration: Instantaneous.

Cost: 1 to cast. Raise the damage to 1d+2 by spending 3 energy.

Prerequisites: Magery 1, and either Pebble or Winged Knife.

Item

Any. *Energy cost to create:* 100.

Entrancing Geode

Regular; resisted by Will

Splits open a stone up to one foot in diameter, revealing a magnificent geode. Anyone looking at the geode from within its front arc must roll Will each turn to avoid becoming entranced, with a +1 bonus for every 2 yards of distance. Those who fail gain the Absent-Minded disadvantage for the spell's duration and are adrift in thoughts of the enchanting stone.

Duration: 1 minute.

Cost: 6 to cast; 3 to maintain.

Time to cast: 4 seconds.

Prerequisites: Colors, Break Rock, and Diamond Blade.

Feet of Clay (VH)

Regular; Resisted by HT

Slowly transforms the target's body into clay, beginning at the feet. Unlike Flesh to Stone, the transformation *doesn't* render the target inanimate. If the initial resistance roll is failed, roll again once per turn to see whether the transformation spreads. It progresses in the following order: feet, legs, torso, arms, hands, neck, head. Critical failures by the caster have no additional effect.

The caster chooses whether to bestow the properties of wet clay or baked clay.

Baked Clay: Affected body parts gain the Injury Tolerance (Homogenous, No Blood) trait, but also gain Fragile (Brittle) and Vulnerability (Crushing ×2).

Wet Clay: Affected body parts gain the Injury Tolerance (Homogenous, No Blood) trait. If exposed to water, they also gain 1 level of Slippery. However, the target suffers penalties as follows:

• *Feet, legs, torso:* Cumulative -1 penalty to Move and Dodge for each affected location. Increase by 1 if Slippery.

• *Arms, hands, neck:* Cumulative -1 penalty to DX and DX-based skills for each affected location. Increase by 1 if Slippery.

• *Head:* -2 penalty on speech-based skill, reaction rolls (except with earthen creatures), and attacks and damage with bites.

Duration: 10 seconds.

Cost: 5 to cast; same cost to maintain.

Time to cast: 2 seconds.

Prerequisites: Magery 2 and Flesh to Stone.

Item

Small stone statuette with baked clay feet. *Energy cost to create:* 700.

Fissure (VH)

Regular

Open a crevasse along a line beginning adjacent to the caster. The fissure starts there and splits the earth in a straight line, for a distance in yards equal to twice the energy put into the spell. For double cost, the fissure spreads in both directions from a point adjacent to the caster (for example, to isolate her from attackers).

Only the ground itself moves; foundations, utility pipes and large objects are undisturbed unless the fissure is wide enough for them to topple or distort under their own weight when they're revealed. A fissure's depth is equal to twice its width. Once the spell's duration expires, the earth flows back into place, engulfing any creatures within as Entombment.

Duration: 10 minutes.

Cost: 5 per yard of width.

Time to cast: The fissure starts to spread after 3 seconds of casting, extending 5 yards per second of concentration to its maximum size.

Prerequisites: Magery 1 and Break Rock.

Item

Staff, wand, or jewelry. Usable only by mages; must touch the origin point. *Energy cost to create:* 600.

Gemstone Lens

Regular

Temporarily transforms a gemstone (raw or worked) into a magnifying lens small enough to hold in one hand. The lens grants the benefits of one or more levels of Microscopic Vision when used.

Duration: 1 minute.

Cost: 2 per level of Microscopic Vision; half that to maintain.

Prerequisites: Diamond Blade, Light.

Item

A tiger's eye gemstone, carved into the shape of an eye. *Energy cost to create:* 300.

Ground Map

Information; Area

Grants the caster a mental map of disruptions to the natural surface of the earth. This identifies buildings, mineshafts, wells, lakes, outsized trees and so on, but not rock formations or caves.

This is also a Knowledge spell.

Base cost: 1/2.

Time to cast: 10 seconds.

Prerequisites: Earth Sense.

Item

Shoes, boots, or sandals. *Energy cost to create:* 400.

Hands of Stone

Regular

Transforms the caster's hands into solid rock. This grants DR 5, Injury Tolerance (Homogenous, No Blood), and Fragile (Brittle) to the transformed location(s), as well as Bad Grip. For double cost, the arms can also be transformed. While it can be useful in combat, the spell is more helpful for its utility – snatching items from a fire, clearing thorns, or catching venomous spiders.

Duration: 1 minute.

Cost: 3 to cast; same to maintain.

Prerequisites: Flesh to Stone.

Item

A stone pendant in the shape of a clenched fist. *Energy cost to create:* 100.

Harmonic Half-Stone

Regular

Cast on two halves of the same stone, creates a sympathetic link between them.

Anyone holding one half can locate the other with spells such as Find Direction and Tell Position; long-distance penalties apply when doing so.

When one half of the stone is disturbed, the other rattles about. This makes for a simple and discreet alarm: one half is placed in a chest or tied to a doorknob, and the other kept beside the bed, or even attached to a bell.

Simple coded messages (like Morse) can be transmitted slowly using the stones.

Duration: 1 day.

Cost: 5 to cast; same cost to maintain.

Prerequisites: Magery 1, Seek Earth and Tell Position.

Keystone

Regular

Bestows intuitive knowledge of how a collection of stones fit together, or could do so. This gives the subject +1 to +5 on skill rolls to identify items or structures made primarily from earth and stone. Alternatively, it offsets *twice* this amount in penalties for haste when assembling or dismantling such items. Examples include drystone walls, archaeological sites, fossils, and the shattered remains of petrified colleagues! The caster can identify the keystone (if any) of a stone structure by concentrating for one second.

Keystone can replace the normal spell prerequisites for Find Weakness, but only when dealing with items made primarily from earth and stone.

Duration: 10 minutes.

Cost: Equal to the bonus to be added; same cost to maintain.

Prerequisites: Earth Sense.

Item

Tool, gloves, or jewelry (spectacles are appropriate in more modern settings). Only affects the wearer. *Energy cost to create:* 100 per point of increase.

Limestone Knives

Area

Causes razor-edged limestone formations to sprout from the ground. In certain terrains these may take another form, such as obsidian shards in a volcanic region. These jagged rocks can slice through flesh and equipment, making them dangerous to traverse. The affected area counts as bad footing (-2 to hit, -1 to defend, +1 movement point/hex); hobnails are insufficient to counteract this.

Anyone moving through the area must make a DX roll every second while moving. Apply the speed penalty for their Move (p. B550). They have a further -2 if not specifically watching their step (-2 on all Vision rolls if they are). Failure means the rocks tear the victim's flesh, inflicting 1d-3 cutting damage. If injured, they must make a Will roll (at +3 for High Pain Threshold or -4 for Low Pain Threshold), with a penalty equal to the damage dealt, to avoid crying out. The blades also snag clothing and equipment; treat this as a Binding (p. B40) with ST 7.

Any fall in the affected area is considered falling on a sharp object, and deals impaling damage (*Damage From Collisions*, p. B430). A character can use a Change Posture maneuver to drop to one knee, or to lie down from kneeling, without this risk.

A character climbing in affected rocks may make a Climbing-2 roll in place of a DX roll; at the GM's discretion, the same may apply to other forms of movement, such as Acrobatics.

Duration: 10 minutes.

Base cost: 2 to cast; same to maintain. Increase cost by 1 to add an Armor Divisor of (2).

Time to cast: 30 seconds.

Prerequisites: Magery 2, Diamond Blade, Earth to Stone.

Item

Wand tipped with stone, which must be pointed at (but not necessarily touch) the target area. Usable only by mages. *Energy cost to create:* 600.

Lodestone

Regular

Turns a small piece of ferrous metal or ore into a lodestone. Can be used as a simple magnetic compass.

Duration: 1 hour.

Cost: 1 to cast; same cost to maintain.

Prerequisites: Seek Landform.

Mine Curse

Area

The ground becomes impenetrable – both physically and conceptually. Any stone in the area gains the Hardened 1 and Reflection modifiers to its DR against physical attack, damaging the equipment used against it.

For large-scale digging or long periods of time, apply a -3 penalty to ST when determining the digging speed of creatures using tools, and roll for tool breakage once per hour (2 in 6 chance).

Any rolls made to analyze or recognize earth, stone and metal (such as Geology, Prospecting or Seek Earth) suffer a -3 penalty and do not benefit from taking extra time.

Only unworked, undisturbed ground is affected by this spell. Even piling up rocks to make a wall negates the benefits of a Mine Curse.

Duration: 1 day.

Base cost: 2 (minimum 2); same cost to maintain.

Prerequisites: Magery 1, Disorient, Earth to Stone, and Spade Curse.

Mother Lode

Information

Cast on a sample of earth, stone, or metal, tells the caster the direction and approximate distance to any *one* of the following: a) the place it was dug out; b) the nearest sample from the same source; c) the place it was processed (cut, smithed, fired, etc.). Any known samples can be excluded if the caster specifically mentions them before casting.

Cost: 4.

Time to cast: 10 seconds.

Prerequisites: Magery 1, Seek Earth and Tell Position.

Item

Staff, wand, or jewelry. Usable only by mages. *Energy cost to create:* 100.

Mountain Roots

Regular

Makes the subject briefly as immovable as the earth below. The subject must be standing on solid earth or stone (worked or natural). Grants a bonus to ST when resisting knockback and velocity when resisting slams. If the subject moves from the spot, the spell ends.

Duration: 1 second.

Cost: 1 to cast *per point* added to the subject's ST and velocity. Half that to maintain.

Prerequisites: Anchor Scree.

Item

Any; affects only the caster. *Energy cost to create:* 100.

Petrified Bones

Regular

The subject gains Injury Tolerance (Unbreakable Bones) (***GURPS Powers,*** p. 53) for the duration of the spell, as her skeleton turns to stone. It has no effect on beings that already possess this advantage. The benefits don't apply against abilities that specifically damage stone.

Duration: 1 minute.

Cost: 5 to cast. 3 to maintain.

Prerequisite: Magery 1 and Flesh to Stone.

Item

(a) Staff or wand made of stone. Usable only by mages; the item must touch the subject. *Energy cost to create:* 300. (b) Clothing or jewelry decorated with images of bones. Always on; affects only the wearer. *Energy cost to create:* 750.

Useful New Spells for the Dungeon

Use Armor of Stone, Bladewraith, Dust Cloud, Elf-Shot, Rock Burst, and Thwarting Eruption in a fight. *Avoid* fights with Crystal Field or Entrancing Geode, and hide tracks with Scatter Dust. Reduce your chances of getting lost with Chalk Finger, Ground Map, Harmonic Half-Stone and Lodestone. Break through bars and grates with Diamond Blade. Infiltrate with Embed in Stone or Swim in Stone. Use Excavate, Reinforce Tunnel and Yielding Earth to survive traps and unstable dungeons. The Sink Post technique is handy for camping. Gild can help with unexpected lycanthropes and provide shiny decoys.

Plough

Area

Ploughs an area of soil to a depth of up to 1 yard, leaving it suitable for planting. The target area becomes ploughed soil (p. 10). Anything buried in the area may be brought to the surface, but the spell doesn't cause damage.

Duration: Instantaneous.

Base cost: 1/5 (minimum 1).

Time to cast: 1 second per energy point.

Prerequisites: Till Earth.

Item

A wand, spade or staff made from the shoulder-blade of an ox. Must touch the area to be affected. *Energy cost to create:* 300.

Pyroclastic Flow (VH)

Special; Area

Unleashes a gout of superheated ash and rock debris from the caster. Treat this as an Emanation (p. B112), but limited to a 60° arc, and with a *minimum* radius of 5 yards.

Anybody completely screened from the caster is behind cover, and targets may use Dodge and Drop (p. B377) to leave the area or get to cover.

Anyone within the area when the spell is cast suffers 2d burning damage and 1d crushing damage. An ash cloud lingers for one minute, blocking vision at distances of a yard or more. Creatures with a comfort zone that includes 1,800°, or that are made of fire, take no burning damage.

This is also a Fire spell.

Duration: Damage is instantaneous. Ash cloud persists for 1 minute.

Base cost: 2 for a 60° arc (minimum 10). The arc of emanation can be increased in 60° increments, adding 1 to the base cost for each additional increment. Double or triple energy cost to increase burning damage by the same proportion. Can't be maintained.

Prerequisites: Magery 3, and at least six Earth spells including Volcano.

Quickmire

Area

Turns earth into a morass that actively engulfs anything standing atop it. This acts as mire (p. 9). Creatures must roll ST or Escape once per round to avoid becoming stuck. On the first failed roll, a victim's feet are engulfed.

They are rooted in place, cannot kick, cannot select the Move or Change Posture maneuvers or change facing, and are at −4 DX for leg-related tasks.

On subsequent turns, the quickmire rolls a Quick Contest of skill vs. the victim's ST or Escape. Victory allows it to engulf an additional body part, in the following order: lower leg, upper leg, waist, torso, shoulders, neck, head. Once the shoulders are engulfed, the victim's arms are also considered grappled (-4 to DX). After the head is engulfed, a victim is dragged down 1″ per second, to a maximum depth of 4 yards.

To break free, the victim must win a Quick Contest of ST or Escape vs. skill. Each attempt takes one second. Victory frees one body part (in reverse order), or frees a victim who is only grappled by the feet. Victory by 5 or more frees an additional body part.

Victims that are not standing sink at different rates. Exact effects are up to the GM; for example, a crawling target's hands and feet are engulfed simultaneously.

Inanimate objects are swallowed at a rate of 1″ per second. Double this for heavy, high-density objects. Very low-density objects and those with a large surface area may not sink at all. Buildings and similar massive, anchored structures do not sink.

Creatures capable of walking across quicksand or water are unaffected by this spell. Create Earth negates Quickmire within the affected area.

Duration: 10 seconds.

Base cost: 1 to affect sand or mud; 2 for solid earth. Same cost to maintain.

Prerequisites: Magery 1 and Earth to Water.

Ram Earth

Regular

Compacts earth, turning loose soil into ordinary soil, or ordinary soil into hard soil (p. B350). This can be used to create hard earth structures (***GURPS Low-Tech Companion 2: Weapons and Warriors,*** p. 27). For double energy cost, turn loose soil into hard soil.

Duration: Casting is instantaneous. Once compressed, the earth retains its new form.

Cost: 1 per cubic yard.

Prerequisites: Shape Earth.

Item

Staff, hammer or glove; must touch the earth to be affected. *Energy cost to create:* 300.

Reconstruct Stone

Regular

As Rebuild, but only affects objects made of earth and stone, and can't affect machines. A favorite of archaeologists – piecing together the Terracotta Warriors goes much faster with a little magic. Also beloved by clumsy jewelers, sculptors, etc.

Duration: Instantaneous.

Cost: 30 if the final mass will be 500 pounds or less; the object's current state of repair is not a factor. Add 1 to cost for every additional 500 pounds or fraction of final mass.

Time to cast: 1 second per point of energy required.

Prerequisites: Break Rock, Drystone Wall, Earth to Stone, and Reinforce Tunnel.

Item

Masonry chisel. *Energy cost to create:* 1000.

Reinforce Tunnel

Regular or Blocking

Grants a bonus on a cave or tunnel's HT rolls to avoid collapse (***GURPS Underground Adventures,*** p. 14). As a Blocking spell, it can halt a collapse in progress; the GM makes an additional roll with the appropriate bonus. Once the spell wears off, the tunnel may resume collapsing. Affects a 10-yard cube but may be extended; simply scale the cost for the overall volume (double for two 10-yard cubes, triple for three and so on).

This spell works only on earth, stone and metal, but a variant of this spell may work on other structures.

This is also a Making and Breaking spell.

Duration: 1 minute.

Cost: 1 per 2 points of bonus. Same cost to maintain. Double cost to reinforce metal.

Time to cast: 4 seconds.

Prerequisites: Magery 1, 4 Earth spells including Ram Earth.

Item

Staff, which is thrust against the floor, wall or ceiling as part of casting. *Energy cost to create:* 100.

Repel Earth

Regular or Blocking

Prevents earth and stone from touching the subject or entering a 1-yard radius around them (but not vice versa).

Protects the subject from airborne sand, thrown rocks, collapsing tunnels and similar hazards. It will even protect against lava flows, although the heat is another matter. A subject can still be buried by sandstorms or landslides, and must take great care when attempting to free themself.

This spell *can't* be used to cushion falls, hover above the ground, and so on – it's the subject who's moving in those cases, not the ground.

This is also a Protection and Warning spell.

Duration: 1 minute.

Cost: 4 to cast; same cost to maintain.

Prerequisites: 6 Earth spells including Walk Through Earth.

Item

Staff, wand, or jewelry. *Energy cost to create:* 800.

Resplendent Geode

Regular

Splits open a stone up to one foot in diameter, revealing a geode of prismatic crystals. If the geode is within an illuminated area, it concentrates and reflects the light, creating a cone of brighter light five yards wide and five yards long. This increases the light level by one step, following the examples in Continual Light (***GURPS Magic,*** p. 110); daylight becomes intensely bright (-3 to Vision). For double cost, a stone up to one yard in diameter can be split, reflecting in a cone ten yards wide and ten yards long.

Anyone within or entering the cone incurs Night Blindness (p. B144) until the spell expires. Those who look directly into the light must make a HT roll or be temporarily blinded. Blindness lasts for 1 second times the margin of failure.

Any laser or light beam directed at the geode is reflected to a random point within the cone, leaving the geode undamaged.

Duration: 10 minutes. Afterwards, the geode dulls and loses its unusual properties.

Cost: 4 to cast; cannot be maintained.

Prerequisites: Magery 1, Break Rock, and Diamond Blade.

Item

A ring made entirely of crystal. *Energy cost to create:* 500.

Rock Burst (VH)

Regular

Induces stress in solid rock, causing fragments of stone to explode outward. This triggers a large-scale rock burst (***GURPS Underground Adventures,*** p. 14) affecting the entire target surface. Treat high or overhead rock bursts as an airburst (p. B415).

Duration: 1 minute.

Cost: 4 per cubic yard (minimum 4).

Time to cast: 1 second per 4 energy points.

Prerequisites: Magery 2, Shape Earth and either Thwarting Eruption *or* Shatter.

Item

Hammer. Usable only by mages. *Energy cost to create:* 600.

Rock Dodging

Regular

Increases awareness of earth-based hazards (such as rockfalls, reefs, asteroids, etc.), granting up to a +3 bonus on DX, Dodge and movement skill rolls to avoid them. A favorite of climbers, smugglers and space pirates.

Duration: 10 minutes.

Cost: Twice the bonus to be granted; half that to maintain.

Time to cast: 2 seconds.

Prerequisites: Seek Earth and Sense Danger.

Item

Any. *Energy cost to create:* 100.

Scatter Dust

Area

Spreads dust, dirt or minor debris across the area in naturalistic patterns. If the area is clean, the spell draws in tiny quantities of dirt and dust from up to a mile away. Useful for making an area seem abandoned or untouched, disguising hidden doors and pit traps, and so on. This spell isn't controlled enough to wipe away footprints, but it does impose a -4 penalty to Tracking rolls.

Duration: Instantaneous.

Base cost: 1/3 (minimum 1).

Item

Any. *Energy cost to create:* 100.

Embezzled Spells

Earth mages create variants of other colleges' spells for their own use. Except as noted, the spells below work as described in ***GURPS Magic***.

Armor of Stone: Stones flow up the subject's body and form a rocky second skin. As Armor (***GURPS Magic,*** p. 167) but the DR is semi-ablative (p. B47). A source of stone is required; the spell can draw stones from deep in the earth, but doesn't work at sea, in entirely artificial surroundings, and so on. Cost is 1 per point of Damage Resistance. Same cost to maintain (use *remaining* DR or pay the higher cost to restore lost DR). *Prerequisites:* Magery 2, Shape Earth.

Bladewraith: The caster becomes partially intangible to stone or metal just long enough to foil an attack. As Phase (***GURPS Magic,*** p. 83) but only effective against metal and stone. *Cost:* 3. *Prerequisites:* Magery 3 and Steelwraith.

Body of Earth: As Body of Stone, but grants the Body of Earth meta-trait (p. B262).

Earth Sense: Like Plant Sense, but instead of sensing information from plants, the subject sees and hears details through nearby earth and unworked stone. Works only in areas with plentiful exposed earth or rock (caves, mud, rocky slopes, deserts); may work at half effect in areas where dense grass, loose straw or similar obstructions cover the earth. *Cost:* 3 to cost. 2 to maintain. *Prerequisites:* Shape Earth, and either Seek Landform or Seek Pass.

Earth Speech: As Plant Speech, but allows conversation with earth and stones. The more solid the earth, the more detailed the information that can be gained. For instance, sand or mud could only tell that it had been stepped on recently (about a day), while a granite boulder could recall details of mounts, dress, and aroma. *Cost:* 3 to cast. 2 to maintain. *Prerequisites:* Magery 1 and Earth Sense.

Sense Earth Spirit: As Sense Spirit, but finds earth elementals, speleids, and similar supernatural spirits of earth. *Base cost:* 1/2 (minimum 1). *Prerequisites:* Magery 1 and either Sense Spirit or Seek Earth.

Seek Fossil

Information

Tells the caster the *direction* and *approximate distance* to the nearest significant fossil. The caster can specify fossils of a particular size and category (as for Animal Spells,***GURPS Magic*** p. 29). Use the long-distance modifiers (***GURPS Magic*** p. 14). Any known fossils may be excluded if the caster specifically mentions them before beginning. This is also a Knowledge spell.

Cost: 4.

Time to cast: 10 seconds.

Prerequisites: Seek Earth or Sense Life.

Item

Small fossil suspended from a chain, used as a pendulum. *Energy cost to create:* 250.

Seismic Broadcast

Regular

Allows a caster to broadcast messages in the form of low-frequency vibrations through the ground (or a wall, pipe, wire or similar continuous solid surface) at up to ten times the normal distance. The message is indiscriminate; any creature within range and touching the same surface can detect it. Due to the low frequency, simple coded signals are best; although speech can be broadcast at one-tenth speed, subjects without Subsonic Hearing or Sensitive Touch must make a Hearing or Touch roll to understand it.

This is also a Sound spell.

Duration: 1 minute.

Cost: 4 to cast; 2 to maintain.

Time to cast: 4 seconds.

Prerequisites: Earthquake or Shake the Earth.

Item

Gloves or ring. *Energy cost to create:* 300.

Seismic Communication

Regular

A more controlled version of Seismic Broadcast. The caster can choose a specific subject for their message – either a creature they know, or a creature whose location they know. Both must be in contact with a continuous surface (typically the ground). They can communicate with the subject at normal speaking speed.

The subject can establish a two-way communication link by casting the spell themselves. Other people can "enter the link" – a new casting of the spell is required (by anyone involved).

When figuring the distance penalty, use the long-distance modifiers (***GURPS Magic*** p. 14). If caster and subject don't know each other, there is an additional -4 penalty. This is also a Sound spell.

Duration: 1 minute.

Cost: 4 to cast; 2 to maintain. Same cost for each additional person added.

Time to cast: 4 seconds.

Prerequisites: Seismic Broadcast.

Item

Gloves or ring. *Energy cost to create:* 500.

Sense World

Information; Special

Reveals the direction to one or more *known* moons, planets, asteroids, or other celestial bodies made of earth, metal, or stone. The caster remains aware of these directions as long as they concentrate. Use the *Long-Distance Modifiers* (p. B55), but multiply all values by 1 million. This spell can't detect stars, ice comets, or gaseous planets without a rocky core. It also can't detect artificial structures, regardless of size. In a universe where the visible planets aren't earth-like bodies but lights on a celestial sphere, drifting gods, or something stranger, this spell is useless.

This is also a Knowledge spell.

Duration: Indefinite.

Cost: 3 for a single celestial body, plus 1 for each additional target.

Prerequisites: Magery 1, Find Direction, and Seek Earth.

Item

Moonstone ring or astronomical instrument. *Energy cost to create:* 150.

Settle Dust

Area

Causes airborne dust, sand etc. to fall to the ground. Cast at a point in open air or water, it affects a sphere. This spell can negate the blinding effects of a Sandstorm or Wall of Air.

Duration: Persists for 1 minute, but the effects are instantaneous.

Base cost: 1/3 (minimum 1).

Prerequisites: Dust Cloud, or Scatter Dust *and* Purify Air.

Item

Staff, wand, or jewelry. *Energy cost to create:* 150.

Shake the Earth

Regular

The subject's footsteps land with thunderous force, causing localized tremors. Unless the subject keeps their feet still, characters suffer a penalty on DX rolls to remain standing, Acrobatics rolls to balance, and on *all* skill rolls to use Subsonic Speech or Vibration Sense. The penalty is equal to the energy put into the spell minus the distance in yards from the subject.

Creatures using Subsonic Hearing or Vibration Sense to track the subject gain a *bonus* equal to the energy put into the spell, regardless of distance.

Duration: 10 seconds.

Cost: 1 to 10; same to maintain.

Prerequisites: Six Earth spells, including Tremor Sense.

Item

Shoes, boots or sandals. *Energy cost to create:* 300.

Skipping Stone

Regular

Enhances the aerodynamic and hydrodynamic properties of flat stones, allowing them to skip great distances over liquid. A stone affected by this spell counts as Fine equipment (+2) and any range penalties when skipping are reduced by 2.

Duration: 1 hour.

Cost: 1 for up to 1 lb. of stones. Double the energy cost to double the weight affected; thus, 10 energy can turn a flat 500 lb. rock into a viable 'bouncing bomb'.

Prerequisites: Pebble or Shape Earth.

Item

Gloves, which must hold the stones to be affected. *Energy cost to create:* 50.

Spade Curse

Area

Affected earth clings to tools and holds them fast. To dig in the area using tools, a successful ST roll is required once per minute. On a critical failure, the tool is stuck fast or swallowed up entirely! For large-scale digging or long periods of time, apply a -3 penalty to ST when determining the digging speed of creatures using tools. Stone and harder materials are not affected by Spade Curse.

Duration: 1 day.

Base cost: 1/5; same cost to maintain. Double, triple or quadruple the cost to penalize the ST roll and digging ST by -1 to -3.

Prerequisites: M1, Shape Earth.

Earth Spells in Dungeon Fantasy

Dungeon Fantasy druids and earth-themed clerics will find these spells useful. Use the following guidelines to determine the level of Power Investiture needed to cast each one. Also see *Useful New Spells for the Dungeon* (p. 34).

PI 1: Diamond Blade, Dust Cloud, Mountain Roots, Scatter Dust, Sense World, Settle Dust.

PI 2: Devitalize Earth, Drystone Wall, Earth Sense, Ground Map, Harmonic Half-Stone, Spade Curse, Till Earth.

PI 3: Elf-Shot, Earth Speech, Magnetize, Mine Curse, Plough, Repel Earth, Seismic Broadcast, Tremor Sense.

PI 4: Animate Fossil, Armor of Stone, Body of Earth, Limestone Needles, Seismic Communication.

PI 5: Fissure, Rock Burst, Surface Gravity.

PI 6: Tectonic Quieting, Visions in Chalk.

Surface Gravity

Area; Resisted by ST

Causes buried objects to “float” to the surface, much as buoyant objects rise to the surface of water – but much more slowly. Objects that fit completely within the target area rise at a rate of 1 yard per 10 seconds, unless anchored in some way. Creatures moving by burrowing, Tunneling, Walk Through Earth or otherwise immersed in the ground are also affected; those traveling through existing passages are not. This spell functions on earth, sand, mud and loose rock, but not on solid stone.

The area of effect extends four yards *into* the target surface (usually down, but potentially sideways or even upwards when cast within a tunnel). This depth can be increased to eight yards for double cost, twelve yards for triple cost, and so on.

Duration: 1 minute. Anything moved by the spell remains in its new position.

Base cost: 1 to cast; same cost to maintain.

Time to cast: 30 seconds.

Prerequisites: Magery 2, Apportation, and Purify Earth.

Item

Staff, wand, or jewelry. Usable only by mages. The item must touch the subject. *Energy cost to create:* 800.

Swim in Stone

Regular

Allows the subject to swim through earth as though it were water, at a speed of half their Basic Move. A subject with the Body of Earth, Body of Stone or Body of Metal trait matching the medium they are swimming through uses full Basic Move instead. The subject has neutral buoyancy, so they don’t naturally sink or float upward.

A Yielding Earth spell allows the subject to dive safely from a height into the ground; otherwise treat this as diving into water, allowing a Swimming or Sport (Diving) roll to negate damage.

This spell otherwise works as Walk Through Earth.

Duration: 10 seconds.

Cost: 4 to cast; same cost to maintain. Double cost to pass through stone. Triple cost to pass through metal.

Prerequisites: Magery 1, and either Yielding Earth *or* Walk Through Earth.

Item

Copper jewelry or silk belt; only affects the wearer. Only usable by mages. *Energy cost to create:* 100.

Tectonic Quieting

Area

Suppresses strain within the ground, reducing the risk of seismic activity. Tectonic Quieting resists Earthquake, Seismic Broadcast, Shake the Earth, Volcano, and other seismic spells. The intensity of any earthquake within the spell’s area is reduced by 1 step on the Mercalli scale (p. 10). Sense rolls based on ground vibration suffer a -2 penalty. Scale the cost to increase the benefits accordingly (double to reduce intensity by two steps and penalize Sense rolls by -4, and so on) and resist at +1 per multiple of cost.

This is also a Protection and Warning spell.

Duration: 1 month.

Base cost: 1/20 to cast (minimum 1); same cost to maintain.

Time to cast: 30 seconds.

Prerequisites: Magery 2 and at least 6 Earth spells, including Predict Earth Movement.

Thwarting Eruption

Blocking

Triggers a violent spray of earth and stone from the ground between the subject and an incoming attack. Imposes a penalty on the attack roll equal to twice the energy put into the spell; the penalty applies to all further attacks from the same direction for 1 turn. If the caster is not the subject, apply distance modifiers as for a Regular spell. On a critical success, melee attackers in the chosen direction must roll vs. DX to avoid being blinded for 1 second.

The ground surface is not damaged by this spell, and the debris vanishes shortly after casting.

Cost: 1 to 3.

Prerequisites: Create Earth.

Item

Wand or jewelry made from a single piece of igneous rock. *Energy cost to create:* 250.

Till Earth

Area

Digs and turns the upper surface of the earth, turning hard soil into normal soil, or normal soil into loose soil (p. B350) to a depth of 1 yard, or less if desired. For double cost, turns hard soil directly into loose soil.

Duration: Instantaneous.

Base cost: 1/10 (minimum 1).

Time to cast: 1 second per energy point.

Prerequisites: 4 Earth spells including Break Rock.

Item

Spade. Must bear a picture of a digging animal. *Energy cost to create:* 100.

Tremor Sense

Regular

Allows the subject to detect vibrations in earth, stone, and metal as though they had the Sensitive Touch and Subsonic Hearing advantages. The spell has no effect on beings that already have both advantages.

Duration: 1 minute.

Cost: 3 to cast; 2 to maintain.

Prerequisites: Keen Touch or Predict Earth Movement.

Item

Staff, wand, or jewelry. *Energy cost to create:* 500.

Ward Earth

Area

Cast on an area, this spell protects natural earth and stone from damage and disturbance. Passing feet and vehicles do not churn up the ground, paint refuses to stick, and would-be initial carvers find their tools skitter off harmlessly. Bullets and shells may shred vegetation, but leave the earth untouched. For efforts to knock over rock formations or snap stalactites, *double* the obstacle's HT, ST, or weight (as relevant to the task). Only deliberate, concerted effort will dig into or alter the warded landscape. Artificial structures only benefit from this spell if constructed entirely from unworked earth and stone.

This is also a Protection and Warning spell.

Duration: 1 hour.

Base cost: 1.

Time to cast: 10 seconds.

Prerequisites: Shape Earth.

Item

Any. *Energy cost to create:* 100.

Visions in Chalk

Regular; Resisted by Will

Draws ancient sensory impressions from a fossil or piece of chalk, and imposes them on the subject. Causes a mild Flashback (p. B136) and requires a Fright check at -3. If the casting roll is a critical success, the caster can impose a moderate flashback instead. The flashback consists of fragmented memories from the creatures that became the stone.

This is also a Knowledge spell.

Cost: 4.

Time to cast: 3 seconds.

Prerequisites: Magery 1, Earth Sense and Prehistory.

Item

Any. *Energy cost to create:* 500.

Yielding Earth

Regular or Blocking

Cushions a subject's fall onto earth or stone. The caster chooses whether to make the surface fluid or elastic for that subject only.

Fluid: the earth reacts like a liquid, splashing and rippling as the subject enters. Halve the subject's velocity (rounding down) to determine how far into the earth they sink; repeat this once per second until the distance reaches zero. The earth then solidifies beneath the subject, pushing them back to the surface before returning to its original form. If the subject is also affected by a Swim in Stone spell (p. 39), they are not automatically pushed back to the surface and can begin swimming at any point.

If the surface isn't deep enough to entirely absorb the fall, on reaching the far side, the subject takes damage based on any remaining velocity before being returned to the surface. This spell never allows a creature to pass *through* a solid surface. Most creatures will need to hold their breath (p. B351) while submerged.

Elastic: the earth reacts like a trampoline (p. B431), bouncing the subject to half the height of the previous fall (rounding down) and granting DR 10 against falling damage. Repeat this once per second until the spell expires or the subject comes to rest. A subject falling at an angle *will* continue sideways motion unless a successful Acrobatics rolls is made.

If the subject is already falling, they will fall another 10 feet (assuming standard gravity of 1G) in the second normally required to cast this spell.

Duration: 1 minute.

Cost: 1 per 50 points of weight; same to maintain.

Prerequisites: Shape Earth.

Item

Clothing or jewelry. *Energy cost to create:* 1,000.

Existing Spells

Badger Paws

see *GURPS Magic: The Least of Spells*, p. 8.

This spell can be used to meet the spell prerequisites for Partial Shapeshifting. If learned in this way, the spell can only be used to gain Anteater's Claws. This doesn't apply if the caster knows all the prerequisites (and their prerequisites, and so on) listed under Partial Shapeshifting in ***GURPS Magic,*** p. 21.

Break Rock

see *GURPS Underground Adventures*, p. 23.

Useful in urban settings for roadworks. With a suitable skill roll, particularly in conjunction with Seek Fossil or similar spells, this spell can be used to safely reveal fossils and similar treasures.

Earth to Stone, Stone to Earth

see *GURPS Magic*, p. 51

Assume that the 'simple metals' produced by Earth to Stone prevents the creation of alloys, as well as radioactive metals (which are the purview of Create Fuel). For more finely-grained control, base casting cost on 1 + the ratio of the materials' weights (rounding up). For example, soil weighs 75 lb. per cubic foot, while granite is twice that, giving a base cost of 3. When casting Stone to Earth, *double* the final cost, as per the original spell costs.

Weight-based casting costs

Material	Weight (lb./ft.^{3})	Ratio	Casting cost
Pumice	40	×0.5	2
Clay	68	×1	N/A
Soil	75	×1	N/A
Ordinary stone	150	×2	3
Aluminum	170	×2	3
Iron	490	×7	8
Copper	560	×8	9
Silver	650	×9	10
Lead	710	×10	11
Mercury	845	×12	13
Gold	1200	×16	17
Platinum	1340	×18	19

GMs concerned about economics can treat these as costs per cubic *foot*, rather than per cubic *yard*. Note that the Permanent duration means these transmuted materials can be both detected and dispelled, limiting their value and making them a poor choice for engineering projects.

In worlds where these materials can be routinely produced through magic, their value plummets accordingly. In our world, aluminium commanded a higher price than gold until 1855, when new manufacturing techniques led to a rapid decline.

Entombment

see *GURPS Magic*, p. 53

When reversing Entombment, calculate distance penalties using the point on the surface directly above the buried creature, or the distance to the creature itself, whichever is *lower*.

Rain of Stones

see *GURPS Magic*, p. 53

The stones remain on the ground as long as the spell continues. If maintained after the first minute, treat the spell's area as bad footing (p. 9).

Stone to Earth

see *GURPS Magic*, p. 51

This, and similar spells, do not affect *creatures* composed of the chosen materials.

Spell Techniques

Advanced earth mages may learn to wield their spells in unusual ways. These options are available as techniques.

Armor of Jade

Hard

Default: Armor of Stone-4.

Prerequisite: Armor of Stone and Bejewel; can't exceed Armor of Stone.

Creates armor of splendid jade rather than plain stone. The subject gains a bonus equal to the armor's DR on resistance rolls against Necromantic spells, and on Intimidate and Leadership rolls. This doubles the casting cost.

Alter Stone

Hard

Default: Stone to Earth-2.

Prerequisite: Stone to Earth; can't exceed Stone to Earth.

Converts one type of stone into another: limestone into sandstone, basalt into quartz, and so on. The GM determines what is possible in a particular setting, as with other uses of this spell. If precious metals can be created, gemstones and ores should not be unbalancing.

Disinterment

Average

Default: Entombment-2.

Prerequisite: Entombment; can't exceed Entombment+2.

Works like reversing an Entombment, but retrieves any buried creature (living or dead) up to 50 feet below ground. Creatures moving freely, such as burrowers, are not eligible targets for this technique.

Dormant Volcano

Hard

Default: Volcano-2.

Prerequisite: Tectonic Quieting and Volcano; can't exceed the lower of these.

Reduces volcanic activity instead of increasing it. Counters Volcano spells on a one-for-one basis, ending the spell if its diameter is reduced to zero. Dormancy can calm a natural volcano's activity for the spell's normal duration, but can't render it permanently dormant or extinct.

Dust from Nothing

Average

Default: Dust Cloud-5.

Prerequisite: Create Earth and Dust Cloud.

Bypasses the need for an existing source of earth.

Embed in Stone

Average

Default: Entombment-3.

Prerequisite: Entombment and Purify Air; can't exceed the lower of these two.

Allows a willing subject of Entombment to merge into a mass of earth or stone large enough to contain him. Though in Suspended Animation, he remains aware of nearby activity – treat as Vibration Sense (p. B96). When the spell's duration ends, he emerges from the earth in the same place he entered.

If the subject is the caster, he can maintain or dismiss this spell despite being asleep.

For double cost, the subject can use their normal senses, but indistinctly – a Sense roll is *always* required to make out details, vision shows only blurry outlines, and hearing is treated as two steps further away.

Excavate

Average

Default: Shape Earth.

Prerequisite: Shape Earth; can't exceed Shape Earth+4.

Allows rapid removal of sand, *loose* earth and small stones from an area, at Move 5. Earth removed is deposited haphazardly nearby, and can't be shaped. Useful for uncovering ruins, finding buried items, or rescuing cave-in victims.

Farrier

Average

Default: Shape Metal-2.

Prerequisite: Shape Metal and an appropriate Animal Handling or Smith skill.

Adapts a horseshoe (or equivalent) to the target animal's foot and attaches it appropriately. All materials must be provided, and the shoe must be touched to the animal's foot. An existing shoe can be replaced as part of the process. This reduces the cost to 2.

Handful of Earth

Average

Default: Create Earth-2.

Prerequisite: Create Earth.

Allows the caster to create earth in their cupped hand(s), rather than in contact with the ground. The quantity created is limited to what the caster's hands can comfortably hold (about 12 cubic inches per hand).

Heart of Living Stone

Average

Default: Heart of Stone-2.

Prerequisite: Heart of Stone; can't exceed Heart of Stone.

Transforms the caster's heart and vital organs (but not the brain) into living essential stone. The vitals hit location gains DR 10 and is treated as Homogenous when determining injury (p. B380). The caster is immune to heart attacks, Evisceration, cardiac poisons, and similar effects targeting the heart. He loses the benefit of any Empathy advantages, but gains the Callous disadvantage and a +4 to resist Sex Appeal, Enthrallment, desperate pleas for aid, and so on. These effects last for 1 hour.

This technique negates and replaces the normal effects of a Heart of Stone spell, as well as rendering the caster immune to the effects of that spell.

Lingering Stones

Hard

Default: Rain of Stones-3.

Prerequisite: Rain of Stones; can't exceed Rain of Stones.

The stones created by the spell persist for 10 minutes, during which the area counts as bad footing (p. 9).

Meteorite Strike

Hard

Default: Rain of Stones-3.

Prerequisite: Rain of Stones; can't exceed Rain of Stones.

Instead of a barrage of stones, this technique conjures a single large rock that explodes as it strikes the ground. Duration is instantaneous. 1d seconds after casting, the centrepoint takes 2d crushing damage, +1d for for every 5 yards of radius. The rest of the area is subject to fragmentation damage (p. B104). Holding a shield overhead does not give automatic protection. *Dodge and Drop* (p. B377) applies to both initial and fragmentation damage. The explosion is loud, equivalent to Metallica (p. B358).

Mountain Grasp

Hard

Default: Mountain Roots-2.

Prerequisite: Mountain Roots and Wallwalker; can't exceed Mountain Roots.

Allows the subject to halt falls and descend safely. Instead of its normal effects, the spell reduces falling velocity when the subject touches a solid surface of earth or stone (unless that object is also falling, like a plummeting boulder!).

Quagmire

Hard

Default: Earth to Water-4.

Prerequisite: Earth to Water; cannot exceed Earth to Water.

For the same cost as turning earth into water, this technique turns earth into mire (p. 9) or sand into quicksand. The transformation entirely eliminates footprints and tracks.

Scour

Average

Default: Sand Jet.

Prerequisite: Sand Jet; cannot exceed Sand Jet+4.

Scours an area with abrasive particles, cleaning grime, rust, paint and debris from hard surfaces. This can create an artistic finish or be used with stencils. The jet deals 1d-5 small piercing per second to exposed skin, and can blind as Sand Jet.

The caster can scour one square foot per second, and can maintain the jet for up to one minute with concentration at no additional cost. The jet has a maximum range in yards equal to the energy put into the spell. The effects of scouring surfaces are permanent.

Sink Post

Average

Default: Shape Earth+4.

Prerequisite: Shape Earth.

Used to embed fence posts and tent pegs firmly into the ground by shaping the earth around them. Objects can be pushed into the affected ground as though it were soft mud, but remain stable when released. This reduces the casting cost to 1/4 per cubic yard.

Stone to Lava

Hard

Default: Stone to Earth-4.

Prerequisite: Stone to Earth and Heat; can't exceed the lower of these.

Transforms solid stone into lava hot enough to deal 3d burning on contact. The lava cools naturally into rock, losing 1d of damage per minute. Must be cast on a whole stone or block, rather than a part of it. Double cost to affect cut or shaped stone, like a wall.

Strengthen Earth Elemental

Hard

Default: Prerequisite spell-5.

Prerequisite: Earth to Stone or Essential Earth; can't exceed prerequisite spell.

Allows the spell to act as Might (***Magic,*** p. 35) with regard to creatures composed of earth, stone, etc. All costs and effects are as Might. The technique defaults to the best known prerequisite; do not buy it separately.

Unbreakable Stone

Average

Default: Essential Earth-2.

Prerequisite: Essential Earth and Earth to Stone; can't exceed Essential Earth.

Focuses enhancement on the *durability* of the targeted stone, making it tough enough to blunt tools. Instead of the normal effects, the stone gains the Hardened 3 modifier to its DR.

Uproot

Average

Default: Purify Earth-2.

Prerequisite: Purify Earth.

Expels objects that protrude from the earth; the caster may choose specific items, specific types or general categories. Can uproot fence posts, headstones, small trees and so on. Items that are entirely buried are unaffected.

At a base cost of 1/4, this technique can be used as an alternative to Harvest for root crops, though they must still be gathered by hand.

Warp Earth Elemental

Hard

Default: Prerequisite spell-5.

Prerequisite: Earth to Water, Earth to Stone, Stone to Earth, or Stone to Flesh; can't exceed prerequisite spell.

Allows the spell to act as Clumsiness, Debility, or Hinder with regard to creatures composed of earth, stone, etc. See the relevant spells (***Magic,*** p. 36) for further information. The technique defaults to the best known prerequisite; do not buy it separately.

Earth-Allied Spells

The boundaries of the College of Earth blur as society and technology changes. While earth and stone remain firmly in the College, the status of metals and earth-derived materials is more flexible. The following spells may be considered part of the College of Earth, subcolleges, Technological spells, or redistributed into a novel college (p. 18).

Asphalt, Brick, and Concrete Spells

Asphalt Wave

Regular

Sends a wave surging through asphalt as though it were water. The caster must choose a starting point (calculate distance penalties from that point). The wave starts there and flows in a line one yard wide, for a distance in yards equal to 5 times the energy put into the spell. It deals knockback (see *Knockback*, p. B378) on whatever it hits; roll 1d for every 2 full points of energy put into the spell. Treat this as damage for knockdown purposes only (this spell does not cause injury). The target's velocity is also reduced by the same amount, or half this amount if traveling in the direction of the wave. Ground vehicles struck by the wave must make a control roll even if they do not suffer knockback.

Multiply the cost by 2 or more to increase the width of the wave by the same factor; this does not increase the knockback dealt by the spell. The width of the wave is limited to the width of the asphalt.

The GM may permit this spell to affect roads of other materials.

Duration: 1 second.

Cost: The wave does 1d of knockback for every 2 points put into it.

Time to cast: 2 seconds.

Prerequisites: Camber and Thwarting Eruption.

> *Door, she thought as the concrete melted under her hands, and a door there was; she was holding the sides of it.*
>
> Diane Duane — *So You Want to Be a Wizard*

Body of Brick (VH)

Regular; resisted by HT

As Body of Stone, but grants the Body of Brick meta-trait (p. 27).

Duration: 1 minute.

Cost: 10 to cast. 5 to maintain.

Time to cast: 5 seconds.

Prerequisites: Stone to Flesh.

Brickbats

Area

This spell can only be cast outdoors in an urban area. Bricks, cobblestones, and similar debris appropriate to the local TL pelt the area from one side of the caster's choice, as though hurled by a mob. This is a Bombardment (p. B111) at skill-14. A hit deals 1d crushing damage. Active defenses, barriers, and armor protect in the usual fashion. Inanimate objects are attacked on the caster's turn and protect with their own DR. The rubble disappears within 10 minutes of the spell ending.

By taking a Concentrate maneuver, the caster can alter the direction from which the projectiles attack, or suspend the attacks. In an area where loose bricks and stones are available, the spell flings them instead of conjuring projectiles. Such items remain after the spell expires.

Duration: 1 minute.

Base cost: 1 to cast (minimum 2). Same cost to maintain.

Prerequisites: Magery 1, Slate Fall and Snatch Brick.

Item

Staff. Usable only by mages. *Energy cost to create:* 400.

Brick Golem (VH)

Enchantment

As Golem (***Magic,*** p. 59). Use the clay golem traits, adding ST +4, DX -1, HP +5, DR 8, DR 10 (Heat/Fire) and Fragile (Brittle).

Cost: 380 or more.

Time to cast: 2 seconds.

Prerequisites: Animation, Enchant, Heat, and Shape Earth.

Brickwork Ladder

Regular

Makes bricks extend outward from a wall at convenient intervals, creating hand- and footholds. A surface affected by this spell is treated as a ladder for climbing, and the protruding bricks allow attaching ropes, balancing objects and so on. Can also be used to create ledges to climb along. The bricks protrude up to 6″, as the caster chooses.

Casters can disguise the effects as harmless ornamental brickwork with a Camouflage roll. At close range, this is unconvincing if the bricks protrude more than an inch.

Duration: 1 minute.

Cost: 2 per square yard (minimum 2). Same cost to maintain.

Prerequisites: Shape Earth and Snatch Brick.

Camber

Regular

Change a road's cross slope (from the middle to the edge) or camber (from one edge to the other). Raising either increases the difficulty of wheeled movement skills by 1 per point of energy; double this for bicycles and other unbalanced vehicles. Lowering has the reverse effect. A high cross slope also drains faster, increasing the speed of drainage by 50% per point of energy. On particularly steep slopes, getting out of a vehicle quickly may require an Acrobatics or DX roll.

Duration: 1 minute.

Cost: 1-3 per 10-yard length. Same to maintain.

Prerequisites: 4 Earth spells including Shape Earth.

Item

Plumb bob or spirit level. *Energy cost to create:* 100.

Cement Jet

Regular

Shoots a spray of cement from one palm. Each turn, the caster rolls versus DX-4 or Innate Attack skill to hit. This attack may be dodged or blocked, but not parried. It can kill or knock down flying swarm creatures. It will extinguish a one-yard-radius area of normal fire.

If the spell strikes the target, the cement clings and weighs him down. Their carried weight increases by 2d lbs. for every point of energy put into the spell. If the attack is blocked with a shield or cloak, the item's weight is increased instead! This effect is cumulative with repeated attacks.

Cement that isn't removed dries solid after 30 minutes, imposing a -2 penalty to DX and DX-based skills. If the additional weight inflicted an encumbrance penalty to Dodge, increase the DX penalty by the same amount.

Heavy rain removes 1 lb. of wet cement per second, while scraping, washing, or immersion removes 1d lb. per second.

Duration: 1 second; once created, the cement remains.

Cost: 1 to 3. The jet's range in yards is equal the energy put into it. Cost to maintain is the same.

Prerequisites: Mud Jet.

Gravel Trap

Regular

Unbinds asphalt and gravel in an area, leaving the stones supernaturally loose. This counts as bad footing and bad driving conditions (-2). Characters running or cycling must make the appropriate skill roll to avoid slipping over.

Vehicles passing through create a spray of gravel behind them. This is a cone with length and width equal to speed (in yards/second) × 1/5. The gravel gives a -2 visibility penalty, distracts concentrating creatures, and may chip glass or cause trivial injuries. If a vehicle turns or skids, the gravel cone widens appropriately.

Duration: 1 minute.

Cost: 3 per 10-yard square. Same to maintain.

Prerequisites: Break Rock or Thwarting Eruption.

Melt Asphalt

Area

Turns asphalt into hot, sticky tar. The surface counts as bad footing, giving +1 movement point per yard (hex) to cross, -2 to attack, -1 to defend, and -2 on most movement skills – but giving +2 *instead* on rolls to resist knockback, and on control rolls to prevent skidding.

Hot tar deals 1d-4 burning damage on contact and adheres, causing Moderate Pain (p. B428) for 1d seconds unless the body part has DR 2+. Scraping it off requires a Ready maneuver for each body part affected but ends the pain; cold water also works. The tar leaves black marks that count as a Distinctive Feature until cleaned off properly.

The asphalt hardens again when the spell ends. A coating of hard asphalt makes hobnails and crampons useless, and reduces any handling bonus from tires by 2. On other surfaces, treat as thick paint.

Duration: 1 minute.

Base cost: 3. Cost to maintain is the same.

Prerequisites: Shape Earth and Heat.

Road Speech

Regular

Functions as Earth Speech, but only for constructed paths and roads (not natural trails). Roads rarely provide information about anything other than travelers, but recall more about them than simple stones. Simple paths can report that a few small creatures hurried along them about a day ago, while an asphalt road could recall the model, color, weight, and plates of a truck that just passed by, or identify a vehicle from a description and report where it was heading.

The spell targets a road known by a particular name (such as Highway 41 or Smithy Lane), regardless of size. When asking questions about a particular stretch of the road, use the long-distance modifiers (***GURPS Magic,*** p. 14) *instead* of the normal range penalties.

Duration: 1 minute. Each minute allows one question and answer.

Cost: 3 to cast. 2 to maintain.

Prerequisites: Magery 1 and Seek Asphalt.

Item

Staff. *Energy cost to create:* 250 for an item that will talk to one particular road, 2,000 for one that will talk to any road.

Rocking Slab

Regular

Makes a paving slab wobbly. Any creature that steps on the slab must roll vs. DX to avoid tripping and falling over. In wet conditions, anyone failing the DX roll is also splashed. If the target spot is occupied, the occupant rolls at +2 as he feels the slab's balance shift.

This spell also affects tiles, brick floors and similar surfaces at the GM's discretion.

Duration: 10 seconds.

Cost: 3 to cast; same cost to maintain.

Prerequisites: Anchor Scree or Shape Earth.

Seek Asphalt

Information

As Seek Earth, except that it senses processed materials such as asphalt, brick, concrete and glass.

Slate Fall

Regular

Causes a slate or stone shingle to plummet from a rooftop towards a target. The use of this spell is similar to Elf-Shot (p. 30). The slate has 1/2D 30, Max 60, Acc 0; roll vs. Dropping skill to hit. Damage is *doubled* when determining knockback and knockdown.

Duration: Instantaneous.

Cost: Any amount up to *twice* your Magery level per second, for 3 seconds. For every 2 energy put into the spell, the slate does 1d+1 cutting damage.

Time to cast: 1 to 3 seconds.

Prerequisites: Magery 1 and Elf-Shot.

Item

Any. *Energy cost to create:* 300.

Snatch Brick

Regular

Allows the caster to effortlessly pull an exposed brick from a wall as part of casting. The weight of the brick must be within the caster's Basic Lift. Any attack with the brick made immediately after casting is treated as a surprise attack (p. B393).

This spell can't be used at range unless the caster also knows Apportation.

Duration: Once removed, the brick stays removed.

Cost: 1 if the brick is attached on one or two sides, 2 if attached on three sides. If the caster can't take hold of the brick (e.g. one in the center of a wall), it can't be targeted.

Wall of Brick

Regular

Creates a single-width brick wall, mortared to the ground. The wall is one yard high, but may be made higher; simply scale the cost as the height (double for 2 yards high, triple for 3 yards high and so on).

Unless built on rock or similar foundations, a freestanding straight wall risks collapse unless the caster maintains concentration. Roll HT once per second to resist collapsing; apply penalties in strong wind. A wall that

collapses disappears. Sensible mages anchor their walls to other structures or add corners for stability.

Duration: 1 minute.

Cost: 2 per yard of wall; same cost to maintain.

Casting time: The wall appears as soon as the casting starts, initially up to 5 yards in length; the caster may extend the walls outward at a rate of one yard of radius per second of concentration.

Prerequisites: Magery 2 and Brickwork Ladder.

Writing on the Wall

Regular

Alters the patterns of brickwork, pebbledash, and so on to create written messages. For double cost, the writing can be concealed within existing patterns, imposing a -4 penalty on skill rolls to detect it.

Messages written in brickwork or masonry have few lines to work with, making them larger: one word per cubic foot in brickwork, or per cubic yard in masonry. This also makes them visible at a greater distance.

A caster who knows Name or Limit can apply those enchantments to the message, and anyone who knows this spell can also learn Name or Limit – but only to use with this spell. This doesn't apply if the caster knows all the prerequisites listed in ***GURPS Magic,*** p. 68.

Duration: 1 hour.

Base cost: 1; same cost to maintain.

Prerequisites: Magery 1, Shape Earth, and *either* Copy *or* Mystic Mark.

Item

Glove or trowel. *Energy cost to create:* 100.

Urban Espionage

Use Architecture (or Spy!, Tradecraft!, etc.) to create a message that's only legible from one specific vantage point. From any other location, apply a penalty to notice and decipher it equal to twice the margin of success on the skill roll. A downside is that the mage can't freely choose where to place their message; the skill roll identifies a surface that will work for their purposes. Thus, this isn't a good choice if they really want a message on the side of City Hall.

Anyone who detects the message can make their own roll to identify the intended vantage point. This is a slow process of trial and error; base time is ten minutes per attempt.

Glass Spells

The College of Glass was introduced in *Glass Magic and the Specularii* (***Pyramid #3/114,*** pp. 17-21). Glass magic may be considered a sub-College of Earth or a specialized College of its own.

Blow Glass

Regular

Allows the caster to shape molten glass through controlled breathing. While the spell is maintained, the glass remains hot enough to shape, and the caster can guide their breath into it as though using a pipe. Does not heat glass.

This is also an Air spell and a Fire spell.

Duration: 1 minute.

Cost: 3 to affect 1 cubic foot of glass at a time. Half that to maintain.

Prerequisites: Create Air, Create Fire and Shape Earth.

Item

A glassblowing pipe. *Energy cost to create:* 100.

Orbiting Shards

Regular

Shards of glass rapidly circle the caster. Any foe in close combat with him is struck by 1d+SM shards, each dealing 1d-3 cutting damage. A shard shatters on impact, reducing the spell's duration by 1 second.

Duration: 1 minute.

Cost: 4 to cast. Cannot be maintained.

Prerequisites: Magery 1 and Glass Missile.

Polarize Glass

Regular

Alters transparency of glass or crystal so that light passing through is filtered. Reduces penalties from glare by 2, and grants Protected Vision against effects passing through the glass. For effects dependent on distance from the light source (such as a Flash spell), treat each 1/4" of glass as an additional yard of distance.

Duration: Permanent.

Cost: 2 per 1-yard square of 1" thickness. For thicker glass, scale the cost accordingly.

Prerequisites: Shape Earth and Tint Glass.

Glass Spell Techniques

The following techniques adapt existing glass spells to unusual situations.

Glass Barbs

Hard

Default: Body of Glass-2.

Prerequisite: Body of Glass.

Instead of transforming your whole body, you extrude shards of glass from your skin. You gain Long Spines (p. B88) and Talons (p. B43), which regenerate when broken. This reduces the energy cost to 2.

One-Way Mirror

Hard

Default: Polarize Glass-2.

Prerequisite: Polarize Glass.

You selectively alter the transparency of glass, making one side translucent and the other reflective. From the reflective side, the glass appears to be an ordinary mirror. This technique changes the spell's cost to 3 per square yard of surface.

When cast on a large block of glass, only one facet is affected. Casting this spell on irregular shapes (such as a glass statue) has unpredictable results.

Prismatic Body

Hard

Default: Body of Glass-2.

Prerequisite: Body of Glass.

Your vitreous body refracts light, giving DR 5 and Injury Tolerance 2, but only against light-based effects (e.g. lasers). The effect makes you extremely visible; when there's any light at all, Vision rolls to notice you are at +10 and you get -10 to Stealth rolls to avoid being seen. The shifting light allows bystanders to detect movement even when looking in the opposite direction! You may suppress the penalty by covering every inch of your skin, but you lose the benefits as well.

Vivarium

Hard

Default: Vitreous Vault-2.

Prerequisite: Vitreous Vault and Create Air; can't exceed Vitreous Vault.

Instead of a solid block of glass, this technique creates a hollow glass case with walls 1" thick, filled with enough breathable air for 24 hours. The occupant can move about freely. The thickness of the walls can be doubled or tripled, increasing the cost proportionally. Use Create Air or Purify Air to refresh the interior.

Prism

Regular

Causes affected glass to act as an optical prism, regardless of actual shape. Prisms can reflect, rotate, and invert images in any direction, refract light, and disperse light into its spectral components. This spell can alter or dispel any existing instance of itself.

Duration: Permanent until dispelled or destroyed.

Cost: 2 per 1-foot cube of class (minimum 2).

Prerequisites: Polarize Glass, and Natural Philosophy or Physics.

Safety Glass

Regular

Makes a glass object more homogenous, reducing the risk of dangerous shattering. If the object breaks, it forms small, smooth chunks rather than jagged shards: any damage they deal is crushing, with a -2 penalty *per die*, and they can't be used as improvised blades.

Duration: Instantaneous.

Cost: 2 per cubic yard affected.

Prerequisites: Shatter Glass.

Shatter Glass

Regular

As Shatter, but only affects glass.

Cost: 1 to 3; does 1d damage for each point of energy put into it.

Prerequisites: Break Rock or Weaken.

Tint Glass

Regular

As Dye, but only affects glass and crystal. Can tint glass or alter its transparency, ranging from fully opaque to fully transparent.

Duration: 1 hour.

Cost: 1 per square foot of surface. Same cost to maintain.

Time to cast: 3 seconds.

Vitreous Vault

Melee

Encases the subject in a solid block of glass. He remains in Suspended Animation until freed by breaking the glass or by the reverse of this spell. A subject who succeeds at an HT roll, or a mage who casts Vitreous Vault on *himself*, may elect to stay awake. This is unwise unless he has some means of breathing while encased in glass. He can break the glass with a successful ST-10 roll.

The glass has DR 5, 100 hp per 1-yard cube, and is Brittle. Any attack dealing at least 20 points of injury shatters the cube if it fails an HT roll.

Duration: Permanent until dispelled or destroyed.

Cost: 5 per 1-yard cube needed to encase the subject. Must encase the entire subject, not just a part of it!

Time to cast: 1 second per 1-yard cube.

Prerequisites: Magery 1 and Flesh to Glass.

Window on the Past

Regular

As Images of the Past, but this spell reveals what was visible *through* a glass surface from the viewer's current position. The nature and shape of the glass affects vision as normal.

An unwary mage may be blinded by a flare, injured by a laser beam, or even petrified by a gorgon as a result of this spell.

Duration: 1 minute.

Cost: 3 to cast. 3 to maintain. The magnitude of the Time modifier is added to the cost, so the spell costs 3 (3 + 0) for "within a minute," but would cost 8 (3 + 5) for "4 to 40 days."

Time to cast: 10 seconds.

Prerequisites: Magery 2, Glass Vision, and History.

Metal Spells

Any serious metal mage requires *The Thaumaturgy of Metallurgy,* in ***Pyramid #3/91, Thaumatology IV,*** pp. 22-28. If using those spells, replace the Create Earth prerequisite with Create Metal in the spells below.

Knowledge of these spells should parallel the society's TL. For example, a culture that does not know iron is present in the blood cannot learn Hemoglobin.

Cold Welding

Regular; resisted by HT

Causes two or more exposed metal surfaces to weld together. When used with a Ready maneuver, this spell can fuse items during a parry or block.

Fused items can be wrenched apart with an ST or Forced Entry roll, resisted by this spell. Where large surfaces are welded, apply penalties from the *Size and Speed/Range Table* (p. B550), treating the surface area in square yards as the Linear Measurement. Both items take normal damage, or double damage on a critical failure; the bonus from Forced Entry at DX+1 or better *reduces* this damage, as does the margin of success.

This is also a Technological spell.

Duration: Instantaneous.

Cost: 2 for a coin-sized object, 3 for an object small enough to be held in one hand. For large surfaces, use 2 per square yard.

Time to cast: 1 second per square yard.

Prerequisites: Magery 2 and Polish Metal.

Chaff

Area

Produces a cloud of metallic strips that hamper electromagnetic sensing. Each casting affects either radar or magnetic senses, but not both. Gives a penalty equal to twice the energy put into the spell on Sense rolls to pinpoint targets in the area, and on attacks reliant on the chosen sense. This spell is not available until the relevant technologies develop (typically TL7), or creatures with such senses are known and studied.

Duration: 1 minute.

Base cost: 1 to 5.

Prerequisites: Magery 1, Create Earth, *and* Dust Cloud.

Conductive Dust

Missile

Flings a cloud of metallic particles from one hand. When it strikes, it does 1d toxic damage to Electrical targets per point of energy put into the spell, then vanishes. Armor and DR does not protect, but the Sealed advantage negates all damage. It has 1/2D 20, Max 40, Acc 1; roll vs. Innate Attack skill to hit.

Non-Electrical targets take no damage, but a hit to the face requires an HT roll. If they fail the HT roll, they are blinded (see *Visibility*, p. B394) for one second per energy point put into the spell. Critical failure increases this to 1d seconds per point put into the spell. On a success, the victim is unaffected.

Duration: 1 second.

Cost: Any amount up to your Magery level per second, for three seconds.

Time to cast: 1 to 3 seconds.

Prerequisites: Magery 1 and Iron Filings.

Create Arsenic

Regular

Creates enough arsenic (p. B439) for a single dose. May produce other toxic metals, such as thallium, at the GM's discretion. The poison can be applied to a meal using Poison Food, replacing that spell's normal effects.

Duration: Instantaneous.

Cost: 3.

Time to cast: 1 minute.

Prerequisites: Magery 2, Create Earth, and Purify Earth *or* Purify Metal.

Gild

Regular

Applies a thin coating of metal to an object. The caster must provide the gilding material. Despite the name, this spell can be used for plating with metals other than gold, such as galvanization.

Duration: Instantaneous.

Cost: 2 per cubic foot, or per square yard for large surfaces. Minimum cost of 1.

Time to cast: 2 seconds.

Prerequisites: Shape Metal.

Hemoglobin

Regular; Resisted by HT or Weaken Blood

Replenishes iron in the blood, healing 1 HP of damage from blood loss. Cast on a healthy subject, grants 1 level of Breath-Holding and a +2 bonus on HT rolls to avoid fatigue from exertion. Temporarily relieves the symptoms of chronic anemia. Can be used as a complementary skill during surgical procedures. Resists Weaken Blood.

In settings where vampirism is a biological phenomenon, this spell may sate the hunger of vampires, or aid in disguising their true nature. Variants exist for other metallic respiratory pigments, such as cuproglobin; apply familiarity penalties.

This is also a Healing spell.

Duration: Healing is instantaneous. Other benefits last for 1 hour.

Cost: 2.

Time to cast: 10 seconds.

Prerequisites: Bloody Iron, or Lend Energy and Shape Earth.

Item

Any. *Energy cost to create:* 500.

Iron Filings

Area

Scatters iron filings over the target area. The caster chooses whether they appear on the ground or up to 4 yards above the caster's own altitude. In the latter case, they fall like rain, affected by wind as normal. The filings reveal magnetic fields, and briefly distract magnetic senses (-4 to Sense rolls until they settle). They deal 1d-3 toxic damage to Electrical targets with exposed electronics, such as unprotected circuit boards; any covering is sufficient to prevent this.

Duration: Instantaneous.

Base cost: 2.

Prerequisites: Magery 1, Create Earth, and Dust Cloud.

Iron Needles

Missile

The caster creates a tangle of iron spikes that erupt outwards when they strike a target. Iron Needles has 1/2D 20, Max 40, Acc 1; roll vs. Innate Attack skill to hit the primary target. Success triggers fragmentation (p. B414) with effective skill 15.

Cost: Any amount up to *twice* your Magery level per second, for three seconds. Does 1d small piercing (pi-) damage per point of energy put into it.

Time to cast: 1 to 3 seconds.

Prerequisites: Magery 1, plus *either* Iron Filings, or Create Earth *and* Shape Metal.

Magnetize

Regular

Imparts magnetism to a ferromagnetic material (primarily iron, steel, nickel, and cobalt, and some rare earth alloys). Functions as an electromagnet; see ***GURPS High Tech: Electricity & Electronics,*** pp. 22-23. The magnetic field has ST equal to twice the energy put into the spell (to a maximum of 8x the magnet's interior diameter in inches).

This is also a Technological spell.

Duration: 1 minute.

Cost: 1 per 2 points of the magnet's ST. Same cost to maintain.

Prerequisites: Lodestone and Lightning, or Restore Metal.

Item

A pair of copper rings, bracelets, or earrings, or gloves ornamented with copper thread. *Energy cost to create:* 500.

Magnets on the Battlefield

Rather than model magnetic effects in detail – more a job for the Technological College than humble Earth magic – resolve combat effects as follows.

A magnetized surface acts as a Bladeturning spell (***GURPS Magic,*** p. 168) limited to ferromagnetic blades, regardless of whether the blade or the armor is magnetized. If both sides are magnetized to the same polarity, they simply repel. Two opposing magnets attract: use the rules for weapons getting stuck under *Picks* (p. B405).

Mercury Blob

Regular

Creates a 50 lb. globule of mercury (a 6-inch diameter sphere) controlled by the caster. With a Concentrate maneuver, the globule can be moved up to Move 2. It deforms freely to seep through cracks, and can cling to walls and even ceilings. Roll against Dropping to have it fall on a target (treat as HP 24 for damage purposes). The metal flows back together at Move 2 if scattered.

The blob will readily adhere to objects or creatures if the caster wills it, and can be shaken free with a successful ST roll. The caster, or any creature if the caster is willing, can roll the blob freely around their body, allowing it to substitute for a balance pole. Creative casters will find other uses.

Duration: 1 minute.

Cost: 5; 3 to maintain.

Prerequisites: Magery 1, Create Earth, and Shape Metal.

Metallic Mist

Area

Produces a cloud laden with toxic metals, such as mercury, thallium, arsenic, etc. The mist settles to the ground within 1d seconds and becomes inert, but anyone exposed to this contact agent must make an HT roll or gain a mild Neurological Disorder (p. B144) and suffer the effects of arsenic poisoning (p. B439).

Duration: Instantaneous.

Base cost: 2.

Prerequisites: Magery 1, Create Arsenic, and Dust Cloud.

Polish Metal

Regular

Harmlessly reverses *superficial* rust, oxidation, tarnish, verdigris, etc. on metal surfaces, and buffs out minor marking. Reflective metals are buffed to a mirror finish.

Duration: Instantaneous.

Cost: 1 per cubic foot.

Time to cast: 1 second per cubic foot.

Prerequisites: Purify Earth or Shape Metal.

Spells for Other Colleges

Some spells from other colleges have specific applications for an Earth mage.

Animal Spells

Partial Shapeshifting

see *GURPS Magic*, p. 34

Anteater's Claws (5 to cast): The subject's hands become powerful digging claws. These function as a shovel for digging earth, and a pick for breaking hard earth (but not stone). The subject gains Sharp Claws and Lifting ST 10 (Accessibility, Only for digging), but also gains No Fine Manipulators (p. B145).

Cat's Whiskers (4 to cast): The subject grows an array of whiskers or sensitive barbels. These allow *silent* use of the Cane Travel technique (***GURPS Underground Adventures,*** p. 21) and grant Vibration Sense (p. B96); choose air or water when casting.

Knowledge Spells

Measurement

See *GURPS Magic*, p. 100.

Measurements relevant to earth and stone include the incline of slopes, hardness, density, colour, transparency, grain size, luster, cleavage direction, magnetism, pH, smoothness, fluorescence, conductivity of heat and current, and strain and stress properties.

If the spell can measure *current* stress within rock formations, it is valuable for seismological research and predicting earthquakes, rock bursts, and similar hazards.

Far-Feeling and Glass Wall

See *GURPS Magic*, pp. 100 and 103.

If GMs permit these spells to reach *inside* solid matter (rather than only through it), they are useful for non-intrusive examination in search of minerals, fossils, and forgotten graves.

Making and Breaking Spells

Find Weakness

See *GURPS Magic*, p. 116.

Can identify cleavage planes in crystals, acting as a complementary skill on a subsequent Jeweler roll to cut them. At the GM's discretion, this may also apply to Artist (Sculpting) rolls with suitable materials. This spell can also be used as a complementary skill on Geology, Engineer (Mining), and Profession (Digging) rolls to identify optimal areas to break, as well as to predict weakness-based hazards such as rock bursts (***GURPS Underground Adventures,*** p. 14).

Sound Spells

Amplify Echoes

Area

Increases the acoustic reflection of surfaces. Hearing rolls to locate the source of a sound, or to perceive and analyze its details, are at -4. Hearing rolls to *notice* a sound in a quiet environment are at +2. Doubles the maximum range of sonar within the area.

Duration: 10 minutes.

Cost: 1/2 to cast; same to maintain.

Prerequisites: Sound and Shape Earth.

Item

Bell or gong. *Energy cost to create:* 200.

Earth Spell Table

Earth Spell List and Prerequisites

Prerequisite counts follow the updated values in ***Thaumatology***. The following table includes spells from the Glass and Metal Colleges in ***Pyramid***. The Metal college proposed altering prerequisites to account for new Metal spells; these changes to prerequisite and prerequisite count are shown in italics after the divider (|).

***** indicates a VH spell ; **S** Same cost to maintain ; **H** Half cost to maintain ; **X** Special cases apply.

M: ***GURPS Magic*** ; AS: ***GURPS Magic: Artillery Spells*** ; DS: ***GURPS Magic: Death Spells*** ; LS: ***GURPS Magic: The Least of Spells*** ; UA: ***GURPS Underground Adventures*** ; P3#91 ***Pyramid #3/91 Thaumatology IV*** ; P3#114: ***Pyramid #3/114 Mind Over Matter***.

Source	Spell Name	Class	College	Duration	Energy	Time to cast	Prereq.	Pre. Count
P3#91 22	Alloy Metal	Reg.	Metal; Mk-Brk	Instant	5 per lb.	10 sec.	M1, Shape Metal	3
M 55	Alter Terrain*	Area	Earth	2d days	1	10 sec.	M3, all four elemental Shape spells, Shape Stone	11
p. 54	Amplify Echoes	Area	Sound	10 min.	1/2 • S	1 sec.	Sound and Shape Earth	3
p. 28	Anchor Scree	Area	Earth	1 min.	3 • S	1 sec.	Glue or Shape Earth	2
p. 28	Animate Fossil	Reg.	Earth	Instant	8 • HX	1 min.	Seek Fossil, and either Summon Spirit or Lend Vitality	4
P3#91 23	Anvil Strike*	Miss.	Metal	Instant	40 per ft.^{3}	10 sec. per cu ft	M3, Rain of Shards, Teleport	13
p. 37	Armor of Stone	Reg.	Earth	1 min.	1 to 5	1 sec.	M2, Shape Earth	2
P3#91 23	Arrow	Miss.	Metal	Instant	1 to Magery	1 sec.	Create Metal	5
p. 46	Asphalt Wave	Reg.	Earth (Brick)	1 sec.	Varies	2 sec.	Camber and Thwarting Eruption	5
p. 28	Assess Land Stability	Info.; Area	Earth	Instant	1 • X	1 sec.	Seek Earth, and one of Find Weakness, Predict Earth Movement, or Sense Danger.	2
LS 8	Badger Paws	Reg.	Earth	1 hr.	2	2 sec.	–	0
p. 28	Bejewel	Reg.	Earth	1 hr.	3 • 1	1 sec.	Diamond Blade	3
p. 37	Bladewraith	Block.	Earth	Instant	3	1 sec.	M3, Steelwraith	6
P3#91 23	Bloody Iron	Reg. R-HT	Metal; Necro	Instant	2	1 sec.	Move Metal	4
p. 49	Blow Glass	Reg.	Earth (Glass)	1 min.	3 per ft.^{3} • H	1 sec.	Create Air, Create Fire and Shape Earth	6
P3#91 23	Blunderbuss	Miss.	Metal	Instant	1 to Magery	1 sec.	Arrow	6
p. 46	Body of Brick	Reg. R-HT	Earth (Brick)	5 sec.	10 • 5	5 sec.	Stone to Flesh	6
p. 37	Body of Earth	Reg. R-HT	Earth	1 min.	10 • 5	5 sec.	Stone to Flesh	6
P3#114 18	Body of Glass*	Reg. R-HT	Earth (Glass)	1 min.	9 • 4	5 sec.	Flesh to Glass	5
M 183	Body of Metal*	Reg. R-HT	Metal; Tech	1 min.	12 • 6	5 sec.	M2, Shape Metal | *Flesh to Metal*	8 | *6*

Source	Spell Name	Class	College	Duration	Energy	Time to cast	Prereq.	Pre. Count
M 54	Body of Stone*	Reg. R-HT	Earth	1 min.	10 • 5	5 sec.	Stone to Flesh	6
AS 12	Boulder Barrage	Area	Earth	Instant	2 to 6	sec.=$\frac{\text{cost}}{2}$	M4 and at least 10 Earth spells, including Rain of Stones and Stone Missile	10
UA 23	Break Rock	Reg.	Earth	Instant	Varies	1 sec.	Shape Earth	2
p. 46	Brickbats	Area	Earth (Brick)	1 min.	1 • S	1 sec.	M1, Slate Fall, Snatch Brick	4
p. 46	Brick Golem	Ench.	Earth (Brick)	Perm	380 or more	2 sec.	Enchant, Shape Earth, Animation, Heat	18
p. 47	Brickwork Ladder	Reg.	Earth (Brick)	1 min.	2 per yd.² • S	1 sec.	Shape Earth and Snatch Brick	3
p. 47	Camber	Reg.	Earth (Brick)	1 min.	1-3 per 10 yds. • S	1 sec.	4 Earth spells including Shape Earth	4
P3#91 24	Celestial Shotgun	Area	Metal	1 min.	2 • SX	1 sec.	M2, Blunderbuss	7
p. 47	Cement Jet	Reg.	Earth (Brick)	1 sec.	1 to 3 • S	1 sec.	Mud Jet	9
p. 51	Chaff	Area	Metal	1 min.	1 to 5	1 sec.	M1, Create Earth or Create Metal, Dust Cloud	5
p. 28	Chalk Finger	Special	Earth	1 min.	1	1 sec.	–	0
p. 51	Cold Welding	Reg. R-HT	Metal	Instant	2 per yd.²	1 sec. yd.²	M2, Polish Metal	4
p. 52	Conductive Dust	Miss.	Metal	1 sec.	1 to Magery	1 to 3 sec.	M1, Iron Filings	6
P3#91 24	Conjure Shield	Reg.	Metal	1 min.	3 to 9	1 sec.	Create Metal	5
M 28	Control Elemental	Special	Air; Earth; Fire; Water	1 min.	Special	2 sec.	Summon Elemental	9
P3#91 27	Control Metal Elemental	Special	Metal	1 min.	Special	2 sec.	Summon Metal Elemental	9
p. 52	Create Arsenic	Reg.	Metal	Instant	3	1 min.	M2, Create Earth, Purify Earth or Purify Metal	11
p. 29	Create Ceramics	Reg.	Earth	Instant	2 per 5 lb.	sec.=cost	M1, Create Earth, Create Fire, and Shape Earth	6
M 51	Create Earth	Reg.	Earth	Perm	2 per yd.³	1 sec.	Earth to Stone	3
M 28	Create Elemental	Special	Air, Earth, Fire, Water	Perm	Special	Special	M2, Control Elemental	10
P3#91 24	Create Metal	Reg.	Metal	Perm	5 per yd.³ • X	1 sec.	Stone to Metal	4
P3#91 27	Create Metal Elemental	Special	Metal	Perm	Special	Special	Control Metal Elemental	10

Source	Spell Name	Class	College	Duration	Energy	Time to cast	Prereq.	Pre. Count
p. 29	Create Path	Reg.	Earth	1 hr.	1 per 20 yds.	1 min.	M1, Create Earth, Shape Earth	4
P3#114 17	Create Sand	Reg.	Earth (Glass)	Perm	2 per yd.³	1 sec.	Earth to Stone	3
p. 29	Crystal Field	Area R-Per	Earth	1 min.	3 • S	5 sec.	M1, Bejewel, and Daze	6
p. 29	Devitalize Earth	Area	Earth	Instant	2	1 sec.	Decay and Shape Earth	4
p. 30	Diamond Blade	Reg.	Earth	1 min.	1 • S	1 sec.	Shape Earth	2
p. 30	Drystone Wall	Reg.	Earth	Instant	5 per 10 yds.	3 min.	M2, Shape Earth	2
p. 30	Dust Cloud	Area	Earth	3 min.	1	1 sec.	Chalk Finger or Sand Jet	1
DS 11	Dust to Dust	Reg. R-HT	Earth	Instant	13	4 sec.	M3, Earth to Air, and Flesh to Stone	5
p. 37	Earth Sense	Reg. R-Hide Path	Earth	1 min.	3 • 2	1 sec.	Shape Earth, and either Seek Landform or Seek Pass	3
p. 37	Earth Speech	Reg.	Earth	1 min.	3/2	1 sec.	M2, Earth Sense	4
M 25	Earth to Air	Reg.	Air, Earth	Perm	5 per yd.³	2 sec.	Create Air, Shape Earth	4
M 51	Earth to Stone	Reg.	Earth	Perm	3 per yd.³	1 sec.	M1, Shape Earth	2
M 52	Earth to Water	Reg.	Earth; Water	Perm	1 per yd.³	1 sec.	M1, Create Water, Shape Earth	6
M 51	Earth Vision	Reg.	Earth; Know.	30 second	2 per 10 yds.	1 sec.	Shape Earth	2
M 54	Earthquake	Area	Earth	1 min.	2 • S	30 sec.	M2, 6 Earth spells inc Earth Vision	6
p. 30	Elf-Shot	Reg.	Earth	Instant	1 or 3	1 sec.	M1, and either Pebble or Winged Knife	1
M 53	Entombment	Reg. R-HT	Earth	Perm	10	3 sec.	M2, 5 Earth spells	5
p. 31	Entrancing Geode	Reg. R-Will	Earth	1 min.	6 • H	4 sec.	Colors, Break Rock, and Diamond Blade	6
M 53	Essential Earth	Reg.	Earth	Perm	8	30 sec.	6 Earth spells	6
P3#91 24	Essential Metal	Reg.	Metal	Perm	12 per yd.³	30 sec.	6 Metal spells	6
p. 31	Feet of Clay	Reg. R-HT	Earth	10 sec.	5 • S	2 sec.	M2, Earth to Stone	3
p. 31	Fissure	Reg.	Earth	10 min.	5 per yd.	Varies	M1, Break Rock	3
P3#114 18	Flesh to Glass	Reg. R-HT	Earth (Glass)	Perm	12	2 sec.	M1, Create Sand, and Earth to Stone	4
P3#91 25	Flesh to Metal	Reg. R-HT	Metal	Perm	20 • X	5 sec. • X	M2, Create Metal	5
M 51	Flesh to Stone	Reg. R-HT	Earth	Perm	10	2 sec.	Earth to Stone	3
LS 8	Gargoyle Skin	Reg. R-HT	Earth	1 min.	2 • 1	2 sec.	–	0

Source	Spell Name	Class	College	Duration	Energy	Time to cast	Prereq.	Pre. Count
p. 32	Gemstone Lens	Reg.	Earth	1 min.	2 per lvl. • H	1 sec.	Diamond Blade, Light	4
p. 52	Gild	Reg.	Metal	Instant	Varies	2 sec.	Shape Metal	3
P3#114 18	Glass Missile	Miss.	Earth (Glass)	Instant	1 to Magery	sec.=cost	Create Sand	4
P3#114 19	Glass Vision	Reg.	Earth (Glass)	30 sec.	1 per 10 yds. • S	1 sec.	Shape Earth	2
P3#114 19	Glasswraith	Reg. R-HT	Earth (Glass)	1 min.	5 • 3	2 sec.	M2, Body of Glass	6
p. 47	Gravel Trap	Reg.	Earth (Brick)	1 min.	3 per 10 yds. • S	1 sec.	Break Rock or Thwarting Eruption	3
p. 32	Ground Map	Area; Info.	Earth	1 min.	1/2	10 sec.	Earth Sense	4
p. 32	Hands of Stone	Reg.	Earth	1 min.	3 • S	1 sec.	Flesh to Stone	4
p. 32	Harmonic Half-Stone	Reg.	Earth	1 day	5 • S	1 sec.	M1, Seek Earth and Tell Position	3
DS 11	Heart of Stone	Reg. R-HT	Earth	Instant	13	3 sec.	M3, Partial Petrification	5
p. 52	Hemoglobin	Reg. R-HT	Metal	Instant and 1 hr.	2	10 sec.	Bloody Iron, or Lend Energy and Shape Earth	3
P3#91 25	Identify Metal	Info.	Know.; Metal	Instant	1	1 sec.	Seek Metal	1
M 169	Iron Arm	Block.	Metal; Protection	Instant	1	1 sec.	DX 11+, Resist Pain | *or Shape Metal*	4 | 3
p. 52	Iron Filings	Area	Metal	Instant	2	1 sec.	M1, Create Earth, Dust Cloud	5
p. 53	Iron Needles	Miss.	Metal	Instant	1 to 2×Magery	1 to 3 sec.	M1, Iron Filings, or Create Earth and Shape Metal	6
p. 32	Keystone	Reg.	Earth	10 min.	1 to 5 • S	1 sec.	Earth Sense	4
p. 33	Limestone Knives	Area	Earth	10 min.	2 • SX	30 sec.	M2, Diamond Blade, Earth to Stone	4
p. 33	Lodestone	Reg.	Earth	1 hr.	1 • S	1 sec.	Seek Landform	2
p. 53	Magnetize	Reg.	Metal, Tech.	1 min.	1 per 2 ST • S	1 sec.	Lodestone and Lightning, or Restore Metal	7
p. 47	Melt Asphalt	Area	Earth (Brick)	1 min.	3 • S	1 sec.	Shape Earth and Heat	6
p. 53	Mercury Blob	Reg.	Metal	1 min.	5 • 3	1 sec.	M1, Create Earth or Create Metal, Shape Metal	9
P3#91 25	Metal to Flesh	Reg.	Metal	Instant	10	5 sec.	Flesh to Metal	6
P3#91 25	Metal to Stone	Reg.	Earth, Metal	Instant	6 per $yd.^3$	1 sec.	Stone to Metal or 4 Metal spells	4
M 183	Metal Vision	Reg.	Know; Metal; Tech	30 sec.	2 per 5 yds. • S	1 sec.	Shape Metal	3
p. 53	Metallic Mist	Area	Metal	Instant	2	1 sec.	M1, Create Arsenic, Dust Cloud	14

Source	Spell Name	Class	College	Duration	Energy	Time to cast	Prereq.	Pre. Count
p. 33	Mine Curse	Area	Earth	1 day	2 • S	1 sec.	M1, Dullness, Earth to Stone, Spade Curse	6
p. 33	Mother Lode	Info.	Earth	Instant	4	10 sec.	Magery 1, Seek Earth and Tell Position	3
p. 34	Mountain Roots	Reg.	Earth	1 sec.	1 per ST+ • H	1 sec.	Anchor Scree	3
P3#91 25	Move Metal	Reg.	Metal	10 sec.	2 lb. • H	1 sec.	Shape Metal	3
M 55	Move Terrain*	Area R-Spec.	Earth	1 hr.	10 • 8	1 min.	Alter Terrain, Hide Object	29
M 52	Mud Jet	Reg.	Earth, Water	1 sec.	1 to 3	1 sec.	Sand Jet and Create Water or Create Earth and Water Jet	8
p. 49	Orbiting Shards	Reg.	Earth (Glass)	1 min.	4	1 sec.	M1, Glass Missile	5
M 52	Partial Petrifaction*	Reg. R-HT	Earth	Perm	12	3 sec.	M2, Flesh to Stone	4
P3#114 17	Partial Vitrification*	Reg. R-HT	Earth (Glass)	Perm	12	3 sec.	M2, Flesh to Glass	5
LS 8	Pebble	Miss.	Earth	Instant	1	1 sec.	–	0
p. 34	Petrified Bones	Reg.	Earth	1 min.	5 • 3	1 sec.	M1, Flesh to Stone	4
p. 34	Plough	Area	Earth	Instant	1/5	sec.=cost	Till Earth	5
p. 49	Polarize Glass	Reg.	Earth (Glass)	Perm	2 per yd.³ • X	1 sec.	Shape Earth and Tint Glass	3
p. 53	Polish Metal	Reg.	Metal	Instant	1 per ft.³	1 sec. per ft.³	Purify Earth or Shape Metal	3
M 51	Predict Earth Movement	Info.	Earth	Instant	2 per day	Varies	4 Earth spells	4
p. 50	Prism	Reg.	Earth (Glass)	Perm	2 per ft.³	1 sec.	Polarize Glass, and Natural Phi_LS_ophy or Physics	4
M 54	Purify Earth	Area	Earth, Plant	Perm	2	30 sec.	Create Earth, Plant Growth	9
P3#91 26	Purify Metal	Area	Metal	Instant	2	30 sec.	Restore Metal	7
p. 34	Pyroclastic Flow	Special; Area	Earth	Instant & 1 min.	2 • X	1 sec.	M3, 6 Earth spells including Volcano	14
p. 34	Quickmire	Area	Earth	10 sec.	1 or 2 • S	1 sec.	M1, Earth to Water	6
P3#114 19	Rain of Glass	Area	Earth (Glass)	1 min.	1 • SX	1 sec.	M2, Glass Missile	5
P3#91 26	Rain of Shards	Area	Metal	1 min.	2 • SX	1 sec.	Celestial Shotgun	8
M 53	Rain of Stones	Area	Earth	1 min.	1 • S	1 sec.	M2, Create Earth	4
p. 35	Ram Earth	Reg.	Earth	Instant	1 per yd.³	1 sec.	Shape Earth	2
p. 35	Reconstruct Stone	Reg.	Earth	Instant	30 • X	sec.=cost	Break Rock, Drystone Wall, Earth to Stone, and Reinforce Tunnel	6

Source	Spell Name	Class	College	Duration	Energy	Time to cast	Prereq.	Pre. Count
p. 35	Reinforce Tunnel	Reg./ Blocking	Earth	1 min.	1 per +2 • SX	4 sec.	M1, 4 Earth spells including Ram Earth	4
p. 35	Repel Earth	Reg./ Blocking	Earth	1 min.	4 • S	1 sec.	6 Earth spells including Walk Through Earth	6
p. 36	Resplendent Geode	Reg.	Earth	10 min..	4	1 sec.	M1, Break Rock and Diamond Blade	4
P3#91 26	Restore Metal	Reg.	Mk-Brk, Metal	Instant	5 per lb.	1 sec.	Rust	6
p. 48	Road Speech	Reg.	Earth (Brick)	1 min.	3 • 2	1 sec.	M1, Seek Asphalt	1
p. 36	Rock Burst (VH)	Reg.	Earth	1 min.	4 per $yd.^3$	sec.=$\frac{\text{cost}}{4}$	M2, Shape Earth and either Thwarting Eruption or Shatter	4
p. 36	Rock Dodging	Reg.	Earth	10 min.	2×bonus • H	2 sec.	Seek Earth and Sense Danger	2
p. 48	Rocking Slab	Reg.	Earth (Brick)	10 sec.	3 • S	1 sec.	Anchor Scree or Shape Earth	2
P3#91 27	Rust	Reg. R-HT-4	Mk-Brk, Metal	Instant	5 per lb.	1 sec.	M1, Create Metal	5
p. 50	Safety Glass	Reg.	Earth (Glass)	Instant	2 per $yd.^3$	1 sec.	Shatter Glass	4
AS 12	Sand Blast	Reg.	Earth	Instant	2 to 6	2 to 6 sec.	M4, Sand Jet, and Sandstorm	10
M 52	Sand Jet	Reg.	Earth	1 sec.	1 to 3 • S	1 sec.	Create Earth	4
M 27	Sandstorm	Area	Air, Earth	1 min.	3 • H	Instant	Windstorm, Create Earth	8
p. 36	Scatter Dust	Area	Earth	Instant	1/3	1 sec.	–	0
p. 48	Seek Asphalt	Info.	Earth (Brick)	Instant	3	10 sec.	–	0
M 50	Seek Earth	Info.	Earth	Instant	3	10 sec.	–	0
p. 37	Seek Fossil	Info.	Earth	Instant	4	10 sec.	Seek Earth or Sense Life	1
UA 22	Seek Landform	Info.	Earth	Instant	3	10 sec.	Seek Earth	1
P3#91 27	Seek Metal	Info.	Know., Metal	Instant	3	10 sec.	–	0
M 51	Seek Pass	Info.	Earth	Instant	3	10 sec.	Seek Earth	1
p. 37	Seismic Broadcast	Reg.	Earth	1 min.	4 • H	4 sec.	Earthquake or Shake the Earth	7
p. 37	Seismic Communication	Reg.	Earth	1 min.	4 • HX	4 sec.	Seismic Broadcast	8
AS 13	Seismic Shock	Area	Earth	Instant	8	1 sec.	M4 and at least 10 Earth spells, including Earthquake	10
p. 37	Sense Earth Spirit	Area; Info.	Earth	Instant	1/2	1 sec.	M1 and either Sense Spirit or Seek Earth	1
p. 38	Sense World	Info.; Special	Earth	Indefinite	3 • X	1 sec.	M1, Find Direction, and Seek Earth	2
p. 38	Settle Dust	Area	Earth	Instant	1/3	1 sec.	Dust Cloud, or Scatter Dust and Purify Air	2
p. 38	Shake the Earth	Reg.	Earth	10 sec.	1 to 10 • S	1 sec.	6 Earth spells, including Tremor Sense	6

Source	Spell Name	Class	College	Duration	Energy	Time to cast	Prereq.	Pre. Count
M 50	Shape Earth	Reg.	Earth	1 min.	1 per yd.³ • H	1 sec.	Seek Earth	1
M 182	Shape Metal	Reg.	Metal, Tech	1 min.	6 • H	1 sec.	M1, Shape Earth or 6 Tech spells | *M1, Identify Metal*	2
P3#91 27	Sharpen Blade	Reg.	Metal	Instant	2 • X	1 sec.	Shape Metal	3
p. 50	Shatter Glass	Reg.	Earth (Glass)	Instant	1 to 3	1 sec.	Break Rock or Weaken	3
p. 38	Skipping Stone	Reg.	Earth	1 hr.	Varies	1 sec.	Pebble or Shape Earth	1
p. 48	Slate Fall	Reg.	Earth (Brick)	Instant	1 to 2×Magery	1 to 3 sec.	M1, Elf-Shot	1
P3#91 27	Smelt Ore	Reg.	Metal	Instant	3 per lb.	10 sec.	Shape Earth, Shape Metal	5
p. 48	Snatch Brick	Reg.	Earth (Brick)	Instant	1-2	1 sec.	–	0
p. 38	Spade Curse	Area	Earth	1 day	1/5 • SX	1 sec.	M1, Shape Earth	2
LS 8	Spotless Hands	Reg.	Earth	1 min.	1	2 sec.	–	0
M 54	Steelwraith	Reg. R-HT	Earth, Metal	1 min.	7 • 4	2 sec.	M2, Walk Through Earth | *M2, Walk Through Metal*	5
M 52	Stone Missile	Miss.	Earth	Instant	1 to Magery	1 to 3 sec.	Create Earth	4
M 51	Stone to Earth	Reg.	Earth	Perm	6 per yd.³	1 sec.	Earth to Stone or any 4 Earth spells	3
M 53	Stone to Flesh	Reg.	Earth	Perm	10	5 sec.	M2, Stone to Earth, Flesh to Stone	5
P3#91 27	Stone to Metal	Reg.	Earth, Metal	Perm	3 per yd.³ • X	1 sec.	M2, Shape Metal	3
M 27	Summon Elemental	Special	Air, Earth, Fire, Water	1 hr.	4	30 sec.	Varies	8
P3#91 27	Summon Metal Elemental	Special	Metal	1 hr.	4 • X	30 sec.	M1, 8 Metal spells	8
p. 39	Surface Gravity	Area R-ST	Earth	1 min.	1 • SX	30 sec.	M2, Apportation, and Purify Earth	10
p. 39	Swim in Stone	Reg.	Earth	10 sec.	Varies	1 sec.	M1 and either Yielding Earth or Walk Through Stone	3
p. 39	Tectonic Quieting	Area	Earth	1 year.	1/20 • S	30 sec.	M2 and at least 6 Earth spells, including Predict Earth Movement	6
p. 40	Thwarting Eruption	Block.	Earth	1 sec.	1 to 3	1 sec.	Create Earth	4
p. 40	Till Earth	Area	Earth	Instant	1/10	sec.=cost	4 Earth spells including Break Rock	4
p. 50	Tint Glass	Reg.	Earth (Glass)	1 hr.	1 per ft.² • S	3 sec.	–	0
UA 22	Trace Labyrinth	Reg.	Earth	1 hr.	3 • 1	10 sec.	M1, Seek Landform	2
P3#91 28	Transmute Metal	Reg.	Metal	1 min.	6 per ft.³ • H	1 sec.	Create Metal, Alloy Metal	6

Source	Spell Name	Class	College	Duration	Energy	Time to cast	Prereq.	Pre. Count
p. 40	Tremor Sense	Reg.	Earth	1 min.	3 • 2	1 sec.	Keen Touch or Predict Earth Movement	1
M 167	Turn Blade	Blocking R-DX	Metal, Protection	Instant	1	1 sec.	Apportation or Spasm | *or Shape Metal*	2 | *3*
p. 40	Visions in Chalk	Reg. R-Will	Earth	Instant	4	3 sec.	M1, Earth Sense and Prehistory	11
p. 51	Vitreous Vault	Melee	Earth (Glass)	Perm	5 per yd.^{3}	sec.$=\frac{\text{cost}}{5}$	M1, Flesh to Glass	5
M 54	Volcano	Reg.	Earth	1 day	15 • 10	1 hr.	Earthquake, 6 Fire spells	13
M 52	Walk Through Earth	Reg.	Earth	10 sec.	3 • S	1 sec.	4 Earth spells	4
P3#91 28	Walk Through Metal	Reg.	Metal	10 sec.	6 • S	1 sec.	4 Metal spells	4
p. 48	Wall of Brick	Reg.	Earth (Brick)	1 min.	2 per yard • S	1 sec.	M2, Brickwork Ladder	4
p. 40	Ward Earth	Area	Earth, Prot.	1 hr.	1 • S	10 sec.	Shape Earth	2
p. 51	Window on the Past	Reg.	Earth (Glass)	1 min.	Varies	10 sec.	M2, Glass Vision, and History	7
p. 49	Writing on the Wall	Reg.	Earth (Brick)	1 hr.	1 • S	1 sec.	M1, Shape Earth, and either Copy or Mystic Mark	8
p. 41	Yielding Earth	Reg. or Block.	Earth	1 min.	1 per 50 lb. • S	1 sec.	Shape Earth	2

Sources and Resources

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Inspiration

Fiction

Fire Sea (Weis, Margaret, and Hickman, Tracy, 1991). Third in the Death Gate series, with the Earth divided into elemental realms. Despite the title, this book revolves around the realm of earth.

Fifth Season (Jemesin, N. K., 2015). First in a trilogy. A dystopia wracked by seismic activity is kept in check by a hated underclass of earth-wizards, until it isn't.

Television

Captain Planet and the Planeteers (Barbara Pyle and Ted Turner, 1990-1992). Super-environmentalists with elemental powers. Kwame uses earth control in a variety of creative ways.